

# ITEMS OF INTEREST.

---

VOL. XIV.

PHILADELPHIA, DECEMBER, 1892.

No. 12.

---

## Thoughts from the Profession.

---

### HONORARY DEGREES.

The Connecticut Valley Dental Society has taken a step that, it seems to us fair and honorable, toward providing for the more worthy and venerated members of the profession such recognition as their long practice and present standing deserves. As now arranged, no college in the Association of Dental Colleges can grant honorary degrees without the consent of that committee; and most of our State societies will not allow any to practice without a college degree, and also a satisfactory examination before their board; so that our best and most experienced practitioners, if they desire to change their residence and practice from one State to another, have no standing or right of practice.

Then to the honor is a right, and an honored custom among all other professions. Why should our profession be an exception?

The following will show the position of the Connecticut Society, and this is one of the oldest and most influential associations in the country:

The Connecticut Valley Dental Society, at its annual meeting, June, 1892, appointed a committee to present to the dental faculty of the University of ———, a petition for conferring the honorary degree of Doctor of Dental Surgery, on such worthy practitioners of dentistry as were in practice previous to 1860, and who still continue in active practice.

The colleges of this country are united in their demand that a uniform course of training and study must be complied with, before the degree of D.D.S. can be conferred on a dental student. Many of the State and local societies are restricting their membership to those holding either a dental or medical degree, thus barring out many practitioners who have labored for years to make for dentistry a name to be honored.

The laws of the different states regulating the practice of dentistry, give to these men as good a standing in the community as those holding either the M.D. or D.D.S., while their general qualifications and superior ability in every department give to them a moral right to the title of doctor, greater than many who hold the college title. The future of American dentistry through college instruction and the judicious enforcement of existing state laws, is carefully guarded. The limit line has been drawn, and is now well understood.

The great universities and colleges of our country yearly confer many different honorary degrees. They are unbought, unsought, often unexpected, and rarely are they undeserved. The recipients are men who have earned the honor by years of devoted labor in special callings. Surely, we have many such worthy men of over thirty years' active practice in dentistry. As members of a so-called profession, are we asking too much in demanding that these veterans may be given an honorary degree, and that the dental departments of our universities and colleges should fall into line with other educational institutions, and judiciously confer such honors.

JAMES McMANUS, D.D.S.,

N. MORGAN, D.D.S.,

G. H. MAXFIELD, D.D.S.,

*Committee.*

---

### ROOM ENOUGH AT THE TOP.

"Don't be half of anything," says a modern writer. Sounder advice was never given in more concise language. The bane of many a man's life is that he is never more than half of anything. Sometimes this is the result of trying to be and do too many things at once, but oftener of not exerting himself sufficiently to be a whole something. Very often men are capable of doing one thing well. By that we mean as well as it can be done—not passably, or fairly, but thoroughly, completely and as it ought to be done. The men who have made their mark in the world are those who have done one thing, and that thing well. Agassiz was a recent and

marked instance of this kind of men. Benjamin Thompson, Count von Rumford was a sample of the other kind—a *rara avis*, to be sure—who did many things, and did them all well; but he wrote himself out, and at the early age of fifty-two he passed out of sight, though he lived some years after, a rather disreputable sort of life, which cast a shade over his former achievements. Agassiz, on the contrary, died in the height of his fame, leaving a name for future ages as one who did his work well.

The injunction to “do nothing by halves” will apply to all classes of men, whether they belong to the learned profession or are engaged in business or the mechanic arts. We think it was Daniel Webster who said there was plenty of room at the top. There is always a surplus of men, and women too, who fill the middle and lower positions, but a scarcity of those who can take the higher ones. The great want of the world is thoroughness, and the mistake which men make, when starting in life, is in not striving for it. There are multitudes of men and women who all their lives suffer themselves to be underlings, and complain that they are such, who might lift themselves out of such positions if they really tried to do so. The trouble is they want somebody else to do the lifting.

So we revert to our text. Don't be half of anything. Young man, young woman—you who are just starting out in life—remember this injunction. Be a whole something. Put your whole soul in whatever you undertake. Don't let your hands do one thing, and your head another. Don't waste the strength of your body in daily toil for a bare living, and then throw away all your brain power in foolish, senseless and unprofitable things. When head and hands work together in common partnership anything in reason can be achieved. When they work on separate jobs the chances are in favor of a terrible failure. The history of the world is full of examples to prove the truth of our assertion, and we need not cite any. But if you foolishly divide your forces—giving your hands to labor and your brain to idleness or mere pleasure—do not complain if you are compelled to remain an underling all your lives, nor envy your fellow men and women who achieve the success which you wish, but do not strive for. Again, we say, don't be half of anything. Aim to be a whole man or a whole woman; be determined to go up higher than you are, always remembering that there is room enough at the top.

If you've tried and have not won,  
Never stop for crying;  
All that's good and great is done  
Just by patient trying.

—Lynn Reporter.

## SOUTHERN DENTAL ASSOCIATION.—A POINTED PRESIDENT'S ADDRESS.

Reported by Mrs. Walker.

*Gentlemen of the Southern Dental Association*:—I propose to bring before you at this meeting several subjects of interest to our profession. The one I deem of greatest importance has been talked of, in an undertone, by many of us for a long time. We should have no secrets in our professional family—the subject is professional dignity, or rather lack of professional dignity, for the subject is too broad for me to touch on any but abuses known to all.

"Every profession has its scum," says a noted Frenchman. Alas, that those whom in the South we term good men should place themselves on a level with that scum by their methods of advertising. True, it is often only a newspaper interview that catches the eye as we glance through the paper, but it is an advertisement none the less. In the secular press of one section we find a column given the dentist who has performed what he considers a very remarkable operation; in that of another section a column and a half is required to properly describe the beauty and perfectness of a piece of extensive crown- and bridge-work; while in still another we read not only of the wonderful inventions of our brother, but also of the architecture and furnishings of his office. In one locality we find a

### COLLEGE GRADUATE ASSERTING HIS SKILL

in every known branch of the profession and guaranteeing his work; in another, the familiar poem, "Mary Had a Little Lamb," adapted to the requirements of a dental advertisement. Such advertisements are usually accompanied by broad head lines, and not infrequently by a picture of the remarkable individual.

Gentlemen, need I tell you that members of our association engage in this reprehensible practice? Is it professional? Is it dignified? Does the profession approve it? Does it win public respect? A prominent man who for twenty years has advertised, said to me in a recent conversation, that he did not remember a single desirable patient who came to him through his advertisements.

Why is it that we are so frequently confronted by such advertisements? Are not the schools primarily responsible for this? One reputable (?) college advertises in the newspapers and holds out, as an inducement to the uninformed would-be student, the fact that the dental graduate is now recognized by the medical profession as occupying the same level as the medical graduate, and

further, that their graduates at once step into a lucrative practice, making in ready money so many dollars a day.

The student while at college should live in an atmosphere of ethics. Does he? It is generally understood that there is one lecture on ethics, delivered usually by the dean at the close of the term, but perhaps not more than one-half of the students hear it.

A worthy professor calls attention to the fact that a student, as a mirror, reflects the idiosyncrasies of his preceptor. What shall we say when a graduate from a college, presumably reputable, with the certificate of the State Examining Board, locates in a town or city and at once calls attention, through the medium of flaming hand-bills, to his "New Dental Parlors" and extraordinarily low fees? Does he not as a mirror reflect the college from which he comes? Are we not agreed that by both precept and example the colleges should sustain and increase our dignity? Are such practices (of both dentists and schools) consistent with our code of ethics? If they are, should not the code be revised? If they are not, should we not feel it our duty to report such violations? Hitherto

#### WE HAVE BEEN TOO TIMID

to report. It is not a personal matter, gentlemen, but we owe it to our profession to aid in every way possible in the suppression of that which will drag us into the mire. The highest court of England quite recently held that a man who joins an honorable and registered society must strictly observe the rules of that society under penalty of forfeiture of his membership, and sustained the action of the General Council of Medical Education and Registration in removing the name of a prominent dentist from their membership, because of his having advertised his business contrary to the rules of that body. The decisions of that court are a precedent for the courts of other countries. Is not the action of that council a worthy precedent for our association?

In most, if not all, of our States, laws have been enacted restricting, in some particulars, the practice of dentistry, and Boards of Dental Examiners have been appointed. These laws were enacted for what was conceived to be the protection of the public and our profession as well. They may not, and do not, fully accomplish the desired result, but they are a step towards a higher standard of requirements for the dentist; and the boards in enforcing them, should have the moral support of all dentists. The boards need the support, for, while it is almost beyond belief that any one would oppose that which even tends toward our elevation, the Board of Tennessee has met with opposition.

Our fathers, in 1869, organized our association for advancement in the science and dignity of our profession. Then, the spirit of professional interest was stronger than the animal of self-interest, and those loyal, high-minded men, did not even dream that one of our membership would ever be so debased as to be valued for personal aggrandizement. It has been said that the

PROFESSIONS ARE MADE STRONG

by what they include, rather than exclude. Let us then include so much love for our grand profession, such high, pure aims in its practice, so much enthusiasm for its advancement, that there will be no room for any unprofessional act or thought. Let us work to an ideal, and let that ideal be as high as finite conception can reach.

In 1890, at the meeting of our association in Atlanta, it was suggested that we be represented at the World's Fair in 1893. The American Association took up the suggestion, and a committee of fifteen has been appointed by the two societies, which committee will meet during our present session. The work of organization is far advanced, and the World's Columbian Dental Congress will be held August 17th to 27th, 1893, in Chicago, Ill. Let us not forget that it was our suggestion, and that as such it behooves us to give the committee all the support they expect from us. Certainly they have a right to expect our presence, and so far as possible we should attend this congress.

In the name of those who have shed lustre on that profession let us be faithful to our sacred trust, transmitting to those who will succeed us an honorable record of duty faithfully performed.

The address was endorsed by the committee on all points except on the question of the proposed dental Chautauqua, the discussion of which was postponed till after the report of the committee on that subject. In the discussion of the address, Dr. B. H. Catching said the President was rather hard on the colleges in the matter of advertising dentists. He did not think that the colleges could be fairly held responsible for the action of their graduates. They should be instructed in ethics, but further than that the colleges could not go.

Dr. R. R. Freeman thought, on the other hand, the colleges were responsible in the example set, man being naturally an imitative animal, following the example of those by whom they were taught, or to whom they look up.

Dr. H. J. McKillops dwelt on the lack of business qualifications in the average dentist, and his duty to be a man among men—a

good citizen, taking an interest in public affairs, elevating himself not only from a professional, but from a social and business standpoint.

Dr. Crawford spoke very earnestly on the subject of violations of the code of ethics, especially in the endorsement of patent nostrums, not only by members of the dental profession, but among men occupying the sacred desks, who permit a portrait to appear in the public prints endorsing "bitters" known to be composed largely of whiskey. He declares the injuries resulting from the indiscriminate use of such nostrums far more baneful than those resulting from the rum traffic, notwithstanding the \$900,000,000 annually expended on ardent spirits. He hoped to see the day when the ethical code would be so pronounced that no man, whether professional, preacher, editor or publisher, would dare to be a party to fraud simply because he was paid for it.

Professor Peabody said that no legislature could legislate a man into a gentleman. Men who boldly blow their brazen bugle blasts make us ashamed of our profession, but we cannot overcome the hydra-headed monster though we may decry it most heartily. The most essential thing for us to do is to educate the public to a comprehension of the matter, making them to understand that from such men they will not receive value in services rendered; they will get only what they pay for—half-rate services at half-rate prices.

---

### FITTING COLLARS TO TEETH.

Take single-rooted teeth, to which a porcelain-faced crown is to be attached. We would, before attempting to trim the root, shorten it almost as much as necessary, and then with safe-sided files, sandpaper, disks, corundum points, and the various forms of scrapers give the root the desired shape. With No. 34 soft iron wire now take an accurate measure of the root. From this a band can be made, and if we have remembered the shape of the measure as it came from the tooth, it can be made to approximate the desired shape with slender pliers. This can now be forced on the stump, and such portions as would go too far under the gum can be cut away, so that it extends beneath the gingival at every point alike; and if the root has been properly shaped, the extreme edge of the crown will fit the closest. The stump and band may now both be ground down together, using a stone that will cut the proximal

sides as well as through the center of the tooth. The reason for not shortening the stump to the necessary height at the start is that the difficulty of taking an accurate measure would be greatly increased.

The procedure in fitting the band for an all gold crown is necessarily much the same, though it is well to contour the band till there is sufficient knuckle to touch the adjoining teeth after the crown is finished, thereby preserving the interdental space.

One word more about the preparation for gold crowns of teeth which need little or no trimming, as they taper from gum to grinding surface. Something more than the thickness of the collar should be cut from the buccal surface of the tooth, and after the collar is properly fitted, small V-shaped pieces may be clipped from the end that is to be closed, and the edges of the gaps brought together so as to touch. These will easily solder up as the grinding surface is being attached. In this way glaring gold will be less conspicuous.

The method of taking a piece of gold and pinching it around a tooth, and depending on this for a fit, will reward us with a fit about one time in ten, or maybe not quite so often.

In casts of molar teeth, where there is enough recession to expose the depression between the roots, a groove may be cut from depression to grinding surface that will permit us to bend in the collar with pliers out of the mouth, and then put it in place. If the teeth are too sensitive for this, 24-k. gold may be used for the band, as this can the more easily be burnished into the depressions as the crown is being set.

Would that I could always make such accurate fits, like some whom I have heard discuss this subject, that a piece of silk would not catch upon the edge of the collar. Many bands go too far under the gum, and if we err either way it would be better for the tooth if the collar stopped just a little short than to go too far. The farther we get beneath the gum the harder it is, generally, to obtain good adaptation, and the more liable are we to have the band standing off at some point, thereby becoming a constant source of irritation, and, as a consequence, in a short time there is the swelling and tenderness characteristic of the pinched gum pedicle, and we being unable to relieve this permanently without removing the cause, our work is likely to prove anything but a joy.

Wherever collars or partial crowns are used for the support of bridge-work, the less of the tooth that is covered, to secure the necessary strength, the better it is for that tooth.

Too much cannot be said in condemnation of letting such collars

extend beneath the gum like ordinary crowns, to become, in a short time, a source of irritation by pumping up and down on the teeth. For instance, a gap on the upper jaw, extending from the first molar to a sound cuspid. On the attachment to the molar all are agreed, but when it comes to the cuspid there is a diversity of opinion. A perfect-fitting collar, slightly broader on its lingual than its labial surface, extending just to the largest portion of the tooth, is indicated almost every time. These may be made by burnishing a piece of gold directly on the tooth which has been previously pinched around it by flat-nosed pliers, taking out small pieces where it is inclined to pucker. But what looks to be a better way is to make a perfect die of the tooth, and around this shape the collar to fit.

—W. K. Slater, in *Headlight*.

---

### ARRANGEMENT OF ARTIFICIAL TEETH.

In view of the many inartistic efforts at the arrangement of teeth which are brought to our notice, a few points on this important branch of dental art may not be out of place. A set of artificial teeth should not only feel comfortable in the mouth, and be of service in masticating the food, but should be so arranged as to hide their artificial nature, and this, above all other things, requires the close attention and artistic ability of the dentist. Unfortunately, too many of our brethren dislike the work, and say they wish they were never called on to make a plate. If they really mean what they say, they must either be poor workmen or take no interest in the work; in either instance the patient must suffer. One great mistake is in trying to have a fixed rule for the arrangement of teeth. There are, comparatively speaking, no fixed rules in dentistry. Each case must stand or fall on its own merits, and each should be judged without any regard to any other.

The first point to which I shall call attention is the selection of teeth. We will speak first of what we have most commonly to deal with—upper sets with natural lower ones—the teeth should be the same color as the natural, of a size to form what we call a good articulation, the point of the upper cuspid fitting between the lower and first bicuspid; next they should be the same shape and general appearance of those remaining. A little space judiciously given will generally tend to a more natural appearance, and in this way a good articulation may be obtained with teeth much smaller than would be required were they set close. The most space should generally be left between the centrals and laterals; the latter should

be a trifle shorter than the former, and just a trifle out of line; not enough to be called an irregularity. Unless the case demands it otherwise the cuspids should be made prominent, particularly at the necks, thus hiding the bicuspid, which should scarcely show from the front. We see many sets where the rule has been reversed, and apparently an effort made to make the bicuspid more prominent than any of the others. These points must all be modified to suit each case. This can only be intelligently done by trying in the mouth on wax or other temporary plate; then little peculiarities may be studied and changes made to accommodate them. The bicuspid and molars must of necessity form a good occlusion with the opposing ones, but even here a little judicious grinding may make a great improvement. The teeth must, of course, be a proper length; the lip, when at rest, is usually a safe guide. If they are too short, the jaws close together too much, giving the appearance of nose and chin trying to meet; if too long, they are just as bad.

Another point which is often overlooked is giving the teeth the proper slope from the gum margin to the cutting edge. They are too often made nearly perpendicular, when the points will generally stand a slight outward slant. This must be governed by the shape of the mouth and position of the lower teeth. Avoid what is called the horseshoe arch, the widest point where the bicuspid come, and narrowest at the second molar. By reversing the order you can come much nearer the desired arrangement. It is sometimes necessary to place the six anterior teeth nearly straight across to restore the contour of the lip, and this regardless of the shape of the ridge, which, though often a safe guide, is not infallible.

In arranging upper and lower sets more liberty may be taken in some directions and less in others; a little variation in shade is not so noticeable, but little, white teeth in the mouth of a large, dark, swarthy person would not suggest a very close study of nature. More care is required in selecting the size. Not having any to go by, you must have each tooth occupy the place which you are led to believe the natural one did, spacing or lapping as the case may require. Not having any natural teeth to match gives you more liberty with the bicuspid and molars. The former may be placed in so as not to show, the latter turned outward and upward. Sometimes the upper teeth must protrude to hold the upper lip in its normal position without forcing the lower to an abnormal one, while others will require being set nearly or quite "on end," for comparatively the same reason.

I have written this paper with a view to the exclusive use of plain teeth, as it is with them only the proper variations of arrange-

ment can be obtained; and were a little more skill used in this respect, it would do more to overcome the prejudice in some minds against them. There are very few sets where the teeth are properly arranged, in which the artificial gum shows enough to be noticeable, and as this is the only advantage the gum teeth have, I think in view of the better occlusion and more perfect results obtainable by using the plain, it is our duty to throw our artistic skill into this branch, and thus overcome this foolish prejudice. I do not wish to be understood as making the fit and working qualities of a set of teeth subservient to the appearance, but I will say that many times were the patient perfectly pleased with the appearance first the fit would be a foregone conclusion.

—R. M. Walker, in *Headlight*.

---

Dr. W. W. Allport says a perfect filling would be one that would fit the cavity like molten gold. Such an one was never yet inserted. A saving filling is what we want, and that is all we can hope to secure. Cohesive gold answers some purposes excellently, but it will not take the place of non-cohesive. We cannot do without either. To get light for the future we must examine the past. Forty years ago we had only non-cohesive gold. All who then made any pretensions to filling teeth were good operators, but they were few in number. The fillings made by these men with soft foil might disintegrate piece by piece, but what was left would preserve the tooth as far as its influence extended. The great lack in that day was a surface that would not disintegrate, and that would withstand mastication. This could not be produced with the soft gold then used, but there was an adaptation to the walls of the cavity that cannot be secured by the cohesive gold of the present day.

Crystal gold was felt to be a great step in advance, simply because it would hold together. But the teeth discolored under it, which was never the case with the old soft foil. The crystal gold fillings did not perfectly fit the cavity. What we need is the adaptation of that early day, with the hard surface of the cohesive gold of to-day.

I have filled hundreds of cavities that I could not see the bottom of. I use the mallet, but I cannot do with it what I can do without it, nor can any experienced man. With the mallet and cohesive gold, every point of the cavity being exposed, one cannot save teeth as with soft gold and only the sense of touch. The tendency of the mallet is to draw the gold away from the walls.

## DR. W. H. DWINELLE.

There is not a dentist in America who will not sigh with regret when he learns that the active days of usefulness of Dr. Dwinelle, of New York, are over. He has retired to his early home in Cazenovia, there to spend the last years of a long and honorable life in the quiet retirement of a country home. What adds another pang to the general sorrow, is the knowledge that he is but inadequately supplied with money for his old age. He has always given as freely as he has received, and spent time and money lavishly in the service of the profession which he has so honored, and to which he has been so devoted. A few years ago, an unfortunate speculation swept away that which he had accumulated, and Dr. Dwinelle was left without sufficient provision for his old age.

We are not violating any of the rules of decorum in making these facts known, for it is through no misdeeds of his own that Dr. Dwinelle has met these misfortunes. Had he been of a selfish, grasping, avaricious nature, he might have been a rich man to day, for the opportunities have been his to accumulate, had he not loved his professional brethren better than he loved himself.

There is not a dentist in America who is not in debt to Dr. Dwinelle. There is not one who is not reaping the benefits of his public professional labors—who has not directly profited by that which was the result of Dr. Dwinelle's earnest study and self-sacrificing devotion to his profession. If he could receive but a tithe of this, his old age would be surrounded by everything that he could wish. Will not the dentists of New York State, especially, remember him now when his days of usefulness are numbered? At the very least they can drop him a letter of sympathy and appreciation, to warm the heart which was never cold to any brother dentist's appeal. If they will enclose something a little more substantial, it will not be taken amiss. It is not charity. Let it be a token of good will and affectionate remembrance to one whose career has been honorable to himself and serviceable to his brother practitioners. How many will remember Dr. Dwinelle when the glad Thanksgiving Day shall come, and testify their gratitude and sympathy to one whose sympathies never yet slumbered when dentists or dentistry were concerned? He may be addressed at Cazenovia, N. Y., or if any one desires to unite with his brother dentists in doing something to smooth the declining years of the honored old veteran, let him address Dr. S. G. Perry, 46 West 37th street, New York City.

—*Editorial in Dental Practitioner.*

## AMERICAN DENTISTRY.

The Defects Apparent in the American System of Dental Education was the theme of a discourse of C. W. Eliot, LL.D., President of Harvard College, some time since. He said that the development of the dental profession in the seventy years of its existence in the United States had been remarkable; but as the development of a profession requires centuries, dentistry could not be expected to possess all the safeguards from injurious influences which have been attained by older professions. The progress of dental science in this country not only has been extraordinarily rapid, but, on the whole, satisfactory; and the hospitality of the American mind to novelties, and the soft, unphosphatic diet of which Americans are fond. Besides this, every cultured American visited a dentist twice a year, while an Englishman only went when his tooth pained him. The former sought relief for future time, the latter for the present.

Is there real ground for the anxiety which exists for the improvement of the status of the profession, and especially dental education?

From the great increase in the number of dentists and of patients, the increase in periodical literature and standard works, and the increase in the organized means of education, he thought there was real ground for that anxiety which manifests itself at the present day in dental literature and discussions.

The improvement must be brought about in a great measure through the organized means for the education of the profession. Our dental schools demand no preliminary examination, while those of England require several university examinations; and this simple fact will in time determine the superiority of the profession in England.

He urged the profession to emulate the zeal of the medical profession in its research and scientific study, and also in their noble example of gratuitous practice; advised the necessity of strict professional etiquette in dealing with patients of other practitioners, and the value of associated action of the profession in the common pursuit of common knowledge, and the value of recorded experience and observation as a help to those coming after, and above all placed the three aids, research, teaching and gratuitous labor, as establishing and ennobling the profession.

There is more gratuitous dentistry done in the hospitals and infirmaries of England than in this country. Let us emulate them.

## ABSCESSSES.

Dr. Ottolengui thus treats an abscess: If the abscess is acute, I think it wiser to cure it before filling the root, except where the tooth is single rooted, and it is decided to amputate the apex and remove it with the abscess attached. Then it is best to fill the root at once, so that the amputation will not leave an empty canal with a gaping opening at the end. These teeth should be filled with the temporary stopping packed solidly into the root. The amputation is accomplished thus: Select a spear drill, and with it pass through gum, process, and root, along its central axis as high up as is decided for the amputation. Follow this hole with a sharp fissure bur, with which, by laterally cutting first one way and then the opposite, the end of the root is easily severed. Where there has been much destruction of the process, its removal will not be difficult. Where, however, this has not occurred, as, for example, in a cuspid where there is a long root and dense alveolus, it may be so difficult to do this that it would be wiser to anesthetize the patient. Then the labial plate of the alveolus may be removed with burs and the amputated root end extracted.

In chronic abscesses I scarcely ever treat other than surgically, so that immediate root filling is more permissible here. Still I prefer for a root filling waxed gloss silk covered with chlora-percha where there is the least chance that some day this must be removed.

It may be argued that I should not advocate seemingly temporary methods; but while it is true that we should hope to make our work permanent, too positive permanence is a detriment rather than an advantage. It never can be certainly asserted of any tooth that its roots will never need to be unfilled. If in no other way, the natural crown may continue to decay till it is lost, when a crowning process may make it imperative to empty the canals. Where they are found filled with a very resistant material, there will always be some difficulty experienced. Again, I have seen teeth lost, where pericementitis had set in, which could not be adequately treated because the root canals were so filled that they could not be emptied, the teeth being too sore to the touch to make the necessary drilling possible.

Either of these methods require that at least a slight layer of oxyphosphate should cover them before gold is packed on them. This will be unnecessary where amalgam is to be depended on. Though in either case oxyphosphate is a fine, close filling, to be finished with a covering of amalgam or gold. And either may be added while the cement is soft.

## THE HUMAN JAW AND TEETH.

"Have the teeth been perpetuated? I had the pleasure of looking at the oldest man known. He was found twenty feet below the surface of the earth. He has been calculated to be over a million years old. I found in his jaw the same equilateral triangle. I have gone over four thousand cases individually, and each presents the same thing. You find it in the embryo from the time it is taken from the womb."

Dr. Bonwill then went on to show by means of his carefully constructed diagrams, how the human teeth in their size and shape, all follow a certain definite law; a law which he had gradually traced out, starting with the principle of the equilateral triangle. He showed that the teeth of the apes were constructed in accordance with a different law, and that there could be no progression or gradation from the teeth of the ape to those of the human jaw. He also showed how perfectly the human teeth and those of all animals were adapted to their purpose, and that a perfect jaw will always remain perfect.

In conclusion he said: "Evidently it is intelligence which has so well adapted the teeth to their uses. The teeth are fitted for their places in the jaw just as an architect would fit the blocks of marble for an arch. Do you suppose the teeth would stay in place unless they were properly fitted? Therefore ascribe to some Being the design. Animals also have jaws just as perfect as any being's. Their teeth were made to fit their needs. Look at the individuality of each tooth! Look at the laws of mastication! When I come to consider the different relations of the teeth, how well adapted they are to get the most use out of them, do I feel the least doubt in my mind that they were designed for their purpose by a Being of intelligence? In the relations which the teeth bear to each other in their adaptation to their purpose, you will find the same regularity which you give to your own work."

Professor F. T. Miles, in speaking of the head of the femur, said: "It is built just for its purpose. It is the work of intelligence, like ours, but much superior." So we see the human mouth built intelligently, but by an intelligence of an infinitely higher order than ours.\*

—*American Journal.*

---

\*So we may say of every part. There is unmistakable design and adaptation in every part. It is marvelous that with its fine and delicate adjustments it can withstand so long the thousand abuses we give it. Truly, "we are fearfully and wonderfully made."—ED. ITEMS.

## SYSTEMATIC READING.

In this age of progress, we believe every intelligent and ambitious dentist is a constant subscriber to one or more journals. Some take a number, and during the month make the effort, at odd times, to assimilate and digest their contents. Others read their journal through as though it were a novel, and then place it on the shelf to be bound at the end of the year, and add another volume to their useless library. Others read with system, and with an object in view, hence, gain education, not simply information—two decidedly different results. A man's library is valuable to him in just such a degree as he has command over it; and, while it is impossible for him to be the possessor of its entire contents, it is possible and easy for him to have this amount of knowledge so under his control as to be able to lay his hands, in a few moments, on the literature of any given subject. As one point in the different suggestions that might be made to attain this end, we would suggest the following: Go to a wholesale stationer; buy a plainly-ruled 250-page day book; have it indexed throughout, thus forming a large index, with an average of about ten pages to each letter of the alphabet. Every month, as your journals are read, note such information as is important, worthy of remembrance, and liable to be of future use to you. Classify these articles under heads that will be suggestive and lead to their being readily found when wanted, and enter them alphabetically in your index. You will be astonished how soon these pages will fill up, and how useful and labor-saving they will prove to you.

As a sample of the utility of such an arrangement, we will suppose that one has received a notice of the monthly meeting of his society, and that Dr.—— is going to read a paper on "Diseases of the Maxillary Sinus." To appreciate and be entertained on such a subject, to say nothing of placing yourself in a position to discuss it intelligently, it is necessary that you are conversant with what has already been written. In a short time, by turning to your index, you note, under the heading "*Antrum*," the literature of the subject. Try it for awhile; there will be no fears about your continuing the habit.

We know a dentist who, though it is several years since he attended college, often refers to notes of lectures and practice in college with much profit. He also keeps a record of all live points he reads of in the journals.

—*The Dental World.*

## THE TEACHING ELEMENT IN CONGRESSES.

A new departure was inaugurated in the Dermatological Congress, recently held in Germany, by cutting down the papers to a minimum, and going a step further by suggesting that no formal business of that kind should be done at the Rome meeting next year. There is much to be said in its favor. If, for example, in the meetings held annually by our dental societies, the time was taken up wholly in demonstrations, and showing such cases of interest as could be collected in the neighborhood, and above all in gathering a really well arranged museum, there is little doubt, that more would be learned than by asking half a dozen persons to read papers on subjects either too recondite for anyone to follow or too commonplace to keep men awake. Dental physiology, dental pathology and bacteriology are quite enough to draw large and interested audiences, and certainly can, when handled by good microscopists who know what they are about, be a means of conveying quite a store of useful information. The mutual intercourse between men, who, living in different centers of different schools of thought, must be beneficial, provided they are encouraged to meet for discussion and conversation. Half the advantages are lost when every one is seated mumchance by his neighbor's side while a lecturer raps out platitudes from a written communication from which he never lifts his eyes. Learned papers are of great value, but they should be reserved for learned societies, where they who attend are sufficiently well up in the subject to be dealt with, to understand if not to discuss it. Even here much valuable time is often lost, because some men always get on their feet whether they know anything of what they are talking about or whether they do not, and the really erudite ones either cannot speak because there is no time, or because they get in the way from sheer *ennui* of going out after the paper. Whether the first six speakers should not be either whipped up by the secretary before the meeting and duly named by the chair, may or may not be a good plan, but it certainly would enhance the value of discussions, and improve the character of our literature.\*

---

\* Our gatherings should be eminently social. Questions should be asked and answered during the reading of papers. But still more in their discussion. Even more advantageous than this is the value of group conversation between sessions where instruments, models and other object lessons can be freely handled, explained and discussed. Many a dull head in these ways will take in valuable items for practice that is dumbfounded by the formal essay and the learned discussion. Even when invited to take part he is afraid of blundering, but in ordinary conversation he is at home.—ED. ITEMS.

## NITRATE OF SILVER FOR SUPERFICIAL DECAY AND FOR SENSITIVE TEETH.

Dr. J. Taft : More than forty years ago, Dr. James Taylor, of Cincinnati, recommended the treatment of incipient decay with nitrate of silver. He used it in both deciduous and permanent teeth. Ever since that time I have used it occasionally, and have been pleased with the results. Dr. Stebbins, of Massachusetts, has presented cases in which decay seemed to be quite arrested by the use of this preparation. In my practice it has at least retarded decay.

Dr. James Truman : Ever since I have been in the profession, whenever anything new came up there has always some one arisen to claim a prior discovery. Dr. Taft says he has used nitrate of silver forty years. Why has he not given it to the rest of us? I have no confidence in such statements. I have been in dentistry more than forty years, and no paper on this subject has been produced. I hold that Dr. Stebbins is the originator of this process, and I believe it one of the most important things introduced for a long time. I am not willing to see the credit taken from him in this manner.

Dr. Taft : Either what I state is true or it is false. Dr. Truman says it is not true. I said I saw this used forty years ago, and I gave the name of the one presenting it. I did not claim anything for myself. I have not kept the information hidden, but have presented it at different times.

Dr. James McManus : The use of nitrate of silver is not new. It has been employed for many years about the roots of teeth, and I have a distinct recollection of its being employed for decay, and more especially for teeth sensitive at their cervical portions. I know Dr. Stebbins well. I do not know when he first commenced its use, but I know that in many cases which he has presented, the decay seems to be arrested. There are many of the old practitioners who could give information on such subjects as these, men from whom the best of us might learn, but who are debarred from giving the results of their long experience because they are without the degree of the schools, which is made essential to admission to some societies, and which they are too old to acquire. In their younger days there were no schools. These men ought to be with us now.

Dr. C. H. Harroun : Dr. James Taylor and Dr. Jonathan Taft reported this remedy many years ago, and I have used it on their recommendation, and got happy results from it.

Dr. W. C. Barrett: I can testify that I heard Dr. Taft present this subject at a meeting of the Michigan State Dental Society a number of years ago, and repeatedly at other times and places. He is not the man to keep a good thing to himself, and every one who knows him should be aware of this fact.

Dr. T. T. Moore: Twenty odd years ago, Dr. Truman recommended nitrate of silver for sensitive dentine to the class in college of which I was a member.

Dr. Peirce: I do not remember the time when nitrate of silver was not used for sensitive dentine. I employed it for this purpose forty years ago. Dr. Buckingham once said that we should use the nitric acid and silver wire as preferable, thus getting it in its fresh state. But that was not for the purpose of arresting decay.

Dr. J. Y. Crawford: There is no question in my mind that nitrate of silver has been used in treatment of diseases of the oral cavity ever since there has been a dental profession. The only question is, has it been employed therapeutically, or surgically?

—Dental Practitioner.

---

### IS THE DEATH RATE INCREASING?

Mr. George H. Knight, in an article published in the February number of the *Cosmopolitan*, makes the pertinent statement that for the decade ending 1860, the annual death rate for New York City was 33.66 per thousand. For the semi-decade ending 1865 it had fallen to 31.33, and in the semi-decade ending 1890 to 25.54; the rate for 1890 being 24.58. This amounts to a saving in the city mentioned of 3,000 lives annually. These results are attributed to the advance of medical science and of state and personal hygiene.

The same writer has it that the average life in Great Britain is nine years longer than it was fifty years ago.

It was the knowledge of these or similar authentic statistics, no doubt, which led Dr. J. Y. Crawford, at the recent banquet given to the Executive Committee of the World's Columbian Dental Congress—rather too warmly, perhaps—to claim that modern dental science had exerted greater potency than all other causes in bringing about this felicitous result. No intelligent observer will deny that the great awakening of civilized men, particularly noticeable in the States, as to the importance of preserving the natural teeth, has, in the last half century, been a perceptible influence in bringing about the increased longevity alluded to, and that it will be still greater in the future.

—J. W. Wassall, in *Dental Review*.

## STATEMENTS OF PATIENTS.

We all hear of patients telling about such and such an operator performing such and such an operation, and we know how ridiculous their statements are—even very intelligent patients; we know how mistaken they are in regard to times. They say how such a tooth was treated, and in a few months afterwards the filling was put in; or, perhaps, they will say the next day the filling was put in. When, if it is our case, we go to the records and find that instead of being put in the next day, it was treated, perhaps, for a month before it was put in. The patients may be honest in their own mind, in making these statements, and think, "Well, it was about the next day they came and the filling was put in." I want to enter my protest against relying too explicitly on the statements of patients of other parties, which are prejudicial to the character of a dentist. I don't believe what my patients say, unless it is verified by my books. When they are talking honestly to me, to the best of their recollection, I don't believe them unless their statements are verified by my books, or my common sense; and I am very careful not to allow my mind to be prejudiced against fellow-practitioners from the statements that any patients may make to me, for I know they are so mistaken; I see it so many times in my practice. I don't want to believe anything unkind or uncharitable of a practitioner merely from the statements of a patient.

*C. E. Latimer.*

---

Dr. G. Lenox Curtis presented the following case of diseased antrum at the First District Society of New York:

Dr. G. with purulent and cystic antrum; was in great pain, and suffering from pyemia. The history was that the diseased condition came about eight years ago, and the cause was attributed to abscessed teeth. For several years an obstinate offensive catarrhal discharge was apparent. The nares on the affected side were closed, and nearly filled on the opposite side, necessitating mouth breathing. The roots of the second bicuspid and molar were abscessed. The roots of the molar were disinfected and filled. The bicuspid root was removed, and the process which had surrounded it. The antrum was nearly filled with pus, cysts, and granulations, and the entire floor necrosed. The diseased portion was removed with burs and curettes. No pain followed the operation, and in three weeks the case was cured.

## SYNCOPE AND ASPHYXIA.

There are three permanent causes of death or modes by which a human creature ceases to exist. While death may be said to be from any one of these three primary causes it is usually complicated and combines any two, or all three of the phenomena.

The causes are associated with the three chief vital organs of the body; the heart, lungs and brain. Death beginning at the heart is said to be syncope; at the lungs, asphyxia; at the brain, coma.

We may have any one or all of these conditions without death, but when we consider that death must come by one or more of these expressions of dissolution, we are the better able to comprehend their significance.

The phenomena known as syncope we will define as failure in the action of the heart, which is speedily followed by symptoms resulting from anæmia of the nerve centers, and these by failing pulmonary functions.

The chief predisposing causes of syncope are, in the female sex, a nervous temperament, weakness, an impoverished condition of the blood and organic structural deficiencies.

The exciting causes are numerous; the more important one, want of sufficient blood in the cavities of the heart, as from excessive hemorrhage or sudden removal of pressure from any of the great blood-vessels.

Another cause is an inadequate supply of blood to the cardiac walls, as from obstruction of the coronary arteries; or a supply of impure blood, as in low fevers, or a hot or crowded room.

Another cause is partial or complete paralysis of the muscular tissue of the heart, either from organic changes or from nervous disturbance which may be either centric, reflex, or intrinsic, or from continued spasmodic contraction of the heart.

Syncope may come on quite suddenly or cause instant death, but usually there are premonitory symptoms before actual insensibility.

The premonitory symptoms are giddiness, trembling, with sinking in the epigastrium; nausea and sometimes vomiting; pallor, with drawn features; chilliness and shivering with clammy perspiration; a very rapid and weak pulse, though the large arteries may throb; marked disturbances of the senses of sight and hearing.

Asphyxia we define as suffocation or lack of oxygenation of the blood from whatever cause. To us, as dentists, this condition

is far more circumscribed than syncope. The causes are closure of the glottis, larynx or trachea, either from a foreign body or spasmodic action.

Another cause is a lack of free oxygen, whether by forcible means or substituting a gas destitute of or incapable of supplying the necessary element to the lung tissue.

Still another cause is through the nervous system whether centric, reflex or intrinsic. Last, insufficient blood supply.

We will recognize this phenomenon by the two clinical symptoms, impeded or suspended respiration, and the color of the surface of the body, which will range from a slight turgidity of the mucous membranes to a decided blue-black of the skin.

Coma is characterized by a stupor or insensibility which is soon followed by disturbances of respiration and circulation. In practice we are liable to have all of these conditions presented. Syncope is most common and ordinarily the least dangerous. The danger to the patient and our responsibility will depend on the conditions under which the patient fainted. If the dentist has not administered a drug or anesthetic, he will not be held responsible should death supervene; but under such conditions there is little danger of a fatal result, though possible.

When the exciting cause is mental, of whatever nature, or from exhaustion, the treatment will be to do what nature always attempts to do, that is, to cause the patient to assume a recumbent position; give free use to the muscles of respiration, apply cold water to the face and chest, volatile stimulants to the nostrils and stimulants to the mouth if the patient is able to receive them. The diffusible ammoniacal preparations are to be preferred. In the domain of anesthesia we will have these three conditions mostly to contend with; here they are especially associated with danger, and demand our intelligent attention.

Dr. Lyman makes this statement in his work on anesthesia: "A dentist's first choice should be nitrous oxide; second and last, sulphuric ether; never chloroform." As there are very few who give ether to-day without the presence of a physician, we will place this last article with chloroform, as far as this paper is concerned, and confine ourselves to the one remaining general anesthetic, nitrous oxide gas.

Clinical experience has now demonstrated that the gas is not only the safest, but in the hands of an ordinarily intelligent and careful dentist is practically safe. While there are records of a number of deaths associated with nitrous oxide gas, Prof. Guilford says he has yet to learn of a single fatal case from the liquid gas.

That there is danger in its use is evident from the large number of men who have abandoned it because of the unfavorable symptoms they have observed. And no one with much experience in its administration will have escaped these unfavorable cases.

I believe we are justified in saying that syncope is not the effect of nitrous oxide, but it is generally accepted that it is incidentally present, and is dangerous in proportion as the patient is filled with the gas, thus preventing its elimination.

Asphyxia is the one condition we have to guard against in the administration of gas. It is quite generally conceded that gas is a true anesthetic and produces its effects by direct action on the nerve centers; that superoxydation does not take place at all, and that asphyxia is only incidental; but where there is a good respiratory organization and the nervous system is not unfavorably acted on by outside influences, there will be sufficient oxygen retained in the system to supply the wants of nature, and nature will tolerate the presence of the inert gas.

Should the face indicate the presence of an undue amount of carbonic acid from whatever cause, it can generally be quickly corrected by removing the face piece and admitting one, two or more breaths of pure air, when the undiluted gas can be admitted again with probably no further trouble.

Should respiration cease entirely and the patient become rapidly black in the face, there is certainly no time to be lost. Throw the patient directly forward, bringing the thorax on the knees; this will compress both the abdomen and thorax and largely expel the contents of the lungs.

With a napkin, pliers or tenaculum draw the tongue well forward; with the finger ascertain that the fauces are well opened, and then place the body in a recumbent position, observing that the head is so placed as to make the air passages as straight as possible, when, if respirations have not begun give diligent attention to artificial respiration. During this condition all volatiles, water or rubbing the extremities are useless, as the nerve terminals are thoroughly anesthetized, and are not capable of responding to such stimulants. What the system needs and must have is oxygen.

We are to-day in the midst of a craze for local anesthetics, the active ingredient of which is cocaine. In this I believe we have a new danger to contend with. While I have not as yet seen anything written scientifically on its effects on the system, we know it has a decided toxic action, and this I believe is directly on the nerve centers, which we know as coma. Circulation and respiration only being affected because of the sedative action on the brain.

The treatment consists of active stimulation, thus assisting nature to diffuse the poison throughout the whole system, thereby reducing its potency to such an extent that nature can successfully eliminate the drug.

—G. H. Wilson, in *Dental Register*.

---

### EXTRACTION OF THE SIXTH YEAR MOLAR.

The jaws are unlike other bones in the body in many respects, but are subject to the same laws of nature governing repair.

An excision, or fracture of a shaft bone, will not unite without producing a shortening. The same rule applies to all bones and flesh wounds. Also, that destruction is always greatest in the direction of the least resistance.

It is popularly supposed that after this tooth has been extracted, that the second molar moves forward and occupies its place. This is not altogether true, and here is where a mistaken theory has been misleading. In every case of early extraction of the first permanent molar, the change that takes place in the jaws is contrary to the popular theory advocated.

There is no force brought to bear on a second molar that would cause it to move forward. The second molar is held in its normal position by its antagonist, and does not move forward; instead, the change is wholly anterior to, and comprises a retrograde movement of, the jaw.

The roots of the sixth year molar penetrate the true maxilla to about one-half their entire length; where extraction is resorted to, the lesion involves not only the process, but far into the jaw proper.

We have exactly the same condition as we would find in a shaft bone where fracture has taken place, only in a less degree.

What would be the result of a fracture of a shaft bone when not supported by splints during the knitting together of the parts? Would not muscular contraction distort that joint, and produce an unsightly and impaired member? If the rule applies to one should it not also to the other?

The part of the jaw implicated in extraction is consequently weakened, and at an early age, when the bones are yielding, is much more acceptable to the pressure of muscles than at a more mature age.

The strongest and most unyielding part of the upper and lower jaw is posterior to the second bicuspid, but owing to the extent of

bone involved in the extraction of this molar, it is made the weakest, and the muscular pressure brought to bear on the anterior portion of the jaw, forces the superior jaw backward and upward, and the lower jaw backward and downward.

The bicuspid, cuspids, and incisors, have not separated in their movement backward, but after the bicuspid lost their antagonism they were forced inward by muscular contraction.

I do not wish to convey the idea that such changes take place after the fifteenth year; but have made these observations where extraction has occurred prior to that time.

If the first molar is extracted before the second molar has erupted, we find the space closing up sooner, and to all appearances there has not been any retrograde movement on the part of the anterior teeth. But on examination of the bite and jaws we find a change, and a change not entirely at the expense of the jaw posterior to the lesion.

It has been taught in our colleges and journals that we must expect the second molar to occupy the space left vacant, and the conclusion of most has been in harmony with these teachings.

It is contrary to all scientific reasoning to expect such a result where extraction takes place at an age when the jaws are so yielding to the forces brought to bear on them.

How often do we find a first molar moving forward to occupy the space left vacant after extracting the second bicuspid?

I have never observed one such instance. Is it not just as lame an argument as that of a second molar moving forward to occupy the first molar's space?

\* \* \* \* \*

There is no doubt that if such changes as above mentioned come about at the age of twelve, that the jaws have not become fully developed and adhering to the law governing repair, the destruction is always the greatest in the direction of the least resistance. We have a retrograde movement in every case of early extraction of the sixth year molar. In the superior maxillary the molar eminence adds its marked features to the face, its consequent absorption, its dire effect on the stronger expression. In every case of early extraction there is an entire loss of this protuberance and the muscles and surfaces over it become shortened and flattened with constriction of the face in its vicinity. There is a depression at the *alæ-nasi* and a sunken condition of the bones which occasionally extend to the floor of the orbit. In the face of all the abnormalities produced, we have our journals full of this or that theory relative to the time when this tooth should be extracted. One writer claims

the eighth year, another the tenth, and another the eleventh or twelfth, and all for what purpose? to bring about a better arrangement and condition of the teeth and for the benefit of humanity in general.

I am safe in making the assertion that nature has not produced as many irregularities as the early extraction of the sixth year molar has occasioned. Does extracting this tooth at an early age preclude all possibility of an overcrowded condition? Can we foretell the size, development and exact arrangement of the teeth and jaws far into the future? If such prophetic knowledge is possessed by a few, the whole profession should know it. Nature's plan of eruption is a most harmonious one. When the first molar is erupted it acts as an anchor or foundation to the arch, always in the proper place competently adapted for the purpose intended, and in the course of time the second molar erupts, reinforcing as it were, in accordance with the eternal fitness of things.

Now are we as a scientific profession going to improve on nature's plan by removing the foundation and dictate our plan of constructing a human jaw? We should have only one object in view when extracting, giving room for incoming teeth and temporary relief. The best safeguard a dentist can have is to preserve, if possible, all of the sixth year molars till that condition has come about when the bones of the face have become perfectly developed and features set, the second molars, bicuspid and canines held in position by firm occlusion. Then, and not till then, do I consider it prudent for the first permanent molar to be removed. Everything is conjecture and visionary when we extract this tooth at an early age with such delusions as some authors advocate, to lead us. Our observation, if closely applied, will not direct or advise such a procedure. The intelligence of the age demands of us all our knowledge can avail, and it does not show we are advancing when we resort to such practice as we have been taught to follow in the past.

—W. B. Conner, in *Ohio Journal*.

---

EDITOR ITEMS:—In the current issue of ITEMS, page 704, you express a desire to hear from a college that does not come under the ban of uncleanness. Permit me to call your attention to the American College of Dental Surgery, 479 Wabash avenue, Chicago. Our Secretary, Dr. Mengus, a teacher of long experience, will tell you that the students are ladies and gentlemen.

C. C. Leech, *Secretary Class of '95.*

## STATE BOARDS.

I am unfortunate in not having had a college education. I received my education in a local schoolhouse, yet I say that the dental colleges of America should not be abolished. While the people need protection, these institutions need some encouragement. There is a position in this case that I would accept, and that is, let each State in the Union say that any person holding a diploma from a reputable institution of learning shall be admitted to practice without further examination; but in the same connection giving each board the power to pass on the diploma that the student holds. That is maintaining the doctrine of State rights which some of us regard so highly.

In Tennessee when the State Board has passed favorably on a dental college, a man holding a diploma from it is entitled to practice without examination.

---

Dr. G. E. Hunt says that penthal, an old compound with a new name, had lately been introduced as a general anesthetic, with considerable success. It is a colorless, highly inflammable, very volatile liquid, insoluble in water, but soluble in alcohol, ether and chloroform. Unlike ether, it is absolutely non-irritant to the mucous membrane of the mouth and the respiratory passages. Its administration is unattended by nausea, exhilaration, or muscular activity. Anesthesia is produced as rapidly as with nitrous oxide, but the action is more prolonged. Consciousness is regained gradually, and recovery is rapid and complete. Full anesthesia may be induced in from three to five minutes, the narcosis lasting four or five minutes. It is administered about the same as ether. Dr. H. C. Wood has experimented with it, however, and pronounces it more dangerous than chloroform.

---

According to the *Missionary Review* for May, Great Britain and Ireland brew more beer every year than the German Empire, and more than twice as much as Austria-Hungary. The beer production of the world is estimated at over 50,000,000,000 gallons per annum. In 1891 Great Britain produced 1,500,000,000 million gallons. Great Britain spends on an average twenty shillings for drink for every half crown it gives to religion. Ireland, in 1890, spent about 11,000,000 sterling on drink; its total rental did not come to more than 9,000,000 sterling.

## Our Translations.

---

### PHLEGMONOUS ABSCESS OF THE CHIN, WITH A FISTULA OF DENTAL ORIGIN.

Little Miss X—, usually of excellent health, and without hereditary antecedents, was attacked, without apparent cause, two months ago, with a swelling the size of a hazel nut, around the region of the chin. This swelling disappeared spontaneously in the course of a few days. Eight days later, the chin became again swollen, more so than before, terminating in an abscess. This abscess was opened by a physician who made two incisions, one on the level of the chin dimple and the other a little back of it on a median line. The orifice of the chin dimple soon closed, leaving in its stead a small, irregular cicatrice. The posterior opening remained fistulous, and continued to issue pus.

The doctor who attended the child, surprised to see the supuration persist so long, advised the family to take her to a surgeon of the hospital. The latter made the diagnosis of osteoperiostitis of the chin ridge of the lower jaw, and advised the transversal incision of the skin on the level of the chin, and scraping of the bone at the same place. The child's mother then consulted Dr. Magitot, who found that the orifice of the fistula under the jaw was open, and secreting a sero-purulent liquid.

The exploration with a probe allowed to penetrate to a depth of four centimeters in a vertical direction, and to come toward the end to a hard surface. In this moment the child screamed, and said that a tooth, which she indicated with the finger, had been touched.

At the examination of the mouth, it was found that of the four inferior incisors, the right central was shorter than the others about one and a half centimeters. Questions addressed to the mother failed to elicit any anterior traumatism which would explain this difference in length. At the same time this tooth was deviated, and projected in front of its neighbors. An exploration with mirror showed that this incisor was of a grayish color, and opac, which entrenched on the yellowish and transparent tint of the neighbors.

These details, together with the special circumstances of the encounter of this tooth by the probe, permitted the following diagnosis :

Periostitis of the radicular extremity of the lower right central incisor, with an abscess in the region of the chin and consecutive fistulas.

Dr. Magitot decided on extraction. Soon after it was observed that the radicular apex presented ordinary alterations of periostitis; denudation for the length of one and two centimeters, ragose condition, partial resorption of tissues, injection and hardening of the ligamental bundles in the vicinity of the denuded point.

No treatment was prescribed except some boric garglings. Two days later the submaxillary fistula was closed, and in four days the healing was complete.

—*Revue Odontologique.*

---

### INCIDENTS OF DENTITION.

Two weeks ago I was called to a child that was said to be suffering from diarrhea and in great danger. During the long journey which I had to make there, from Paris to Bordeaux, I happened to come across, among my journals, the last issue of the *Bulletin Medical*, which contained the discussions at the Academy of Medicine on the report of Dr. Ollivier on the accidents of dentition. It seemed that the learned teachers were far from holding one opinion. While M. Magitot contended there were no diseases of dentition, and that "they ought to be erased from the text-books on medical nosology," M. Pamerd demonstrated, by means of numerous observations, that the diseases of dentition are a well established fact, and that every child that cuts its teeth is sick.

I was not then interested in the differences as to the etiological side of the discussion, but all seemed to agree that incision of the gums brought about very generally the disappearance of the accidents.

As I could diagnose it since my arrival, my little patient presented the symptoms attributed to dentition, which had been recalled in the course of the learned discussion.

This child, which was of a strong constitution, left the breast on the fourth month, and continued taking its milk from the bottle. This change of nourishment did not seem to affect the child much, except occasioning diarrhea for a few days, but then it soon regained its good humor. The first teeth, the lower incisors, appeared toward the seventh month. We were in the ninth month then.

Since ten days the trouble commenced, so much so as to become soon alarming; gastro-intestinal trouble, repeated diarrheas, vomiting, insomnia, rise of temperature. The treatment was mostly internal

and general. The milk, which the child could no longer digest, was replaced by grogs (three teaspoonfuls of whiskey in a large glass of liquid, half boiled water and half Vichy), lime water, lactic acid, etc. When I saw the child it was very much run down, and the attending physician did not hide from me the seriousness of its condition.

Influenced by the reading on my way there, I called the attention of the physician to the condition of the gums. The mucous membrane was red, warm, stiff, and had on the anterior border of the superior maxillary two mamillated surfaces, indicating that two superior central incisors were on the way of making their appearance. Very often the child would bring its hands there. I proposed lancing of the gums, which I did in the presence of the physician. The horizontal incision was made deep enough to reach the crowns of each upper incisor on the labial surface; the incidental bleeding was quickly and easily arrested by boricated wadding. A favorable change set in at once, the ordinary milk diet was resumed, insomnia disappeared, and after ten days both teeth appeared outside the gum, and the child was cured.

What we notice in this case is as follows:

1st. The contemporaneity of the troubles and the eruption of the two upper central incisors. This agrees with the remark of Constantin Paul, who says that the upper incisors provoke troubles oftener than the lower.

2nd. Though the child changed to artificial nursing between the fourth and ninth months, no bad consequences were noticed then.

3rd. There was local irritation, which resulted in a gingival inflammation limited to the erupting region.

4th. The immediate disappearance of the trouble after the lancing of the gum.

It is desirable that our colleagues make similar inquiries in their practice, and no doubt a collection of sincere observations emanating from practicing dentists will greatly assist the study of this debated question.

—Prof. Ch. Godon, of Paris, in *Revue Internationale d'Odontologie*.

---

TEMPERING COLD CHISELS.—Heat the chisel to a low heat, so as not to raise the scale, and dip in to a brine of salt and water, in quantities of one and ten quarts respectively. Leave heat enough in the tool to allow its being run down to a required hardness, which is designated by a pigeon blue color. The chisel should be made stout enough to resist a pressure which, in using, would tend to spring it when put to a test.

## INCIDENTS OF DENTITION.

Report to the Academy of Medicine of Paris by a Commission composed of Drs. Magitot and A. Ollivier; A. Ollivier, reporter.

## [EXTRACT.]

## ON HYSTERIA IN NEWLY-BORN AND CHILDREN.

Hysteria exists in very young children, though generally the observed convulsive incidents in the very young have been termed under eclampsia. It presents itself in three degrees, characterized by the corresponding phenomena, as follows: 1st. Emotional disturbances. 2nd. Fainting fits. 3rd. Strong convulsive attacks. However, it were erroneous to confine oneself to the nervous phenomena exclusively, and M. Chaunier, who had examined a great number of children, had invariably endeavored to find out if those phenomena were not produced by organic troubles existing contemporaneously, or even anteriorly, which would help to explain them. The teeth are not considered an important semeiotic symptom, though, on the other hand, certain observers, and particularly Vogel, have noted partial convulsions in nearly all the children whose teeth were cutting. But even the authority of Vogel did not suffice to convert the German physicians to this idea.

Politzer was the first to protest vehemently against this theory. He said it was time there should be no more question in pathology and therapeutics as to troubles attributed to dentition. He said, explaining strong obscure phenomena by troubles incident to the evolution of the teeth, is like putting an unknown in place of another unknown; it were better, in such case, to confess one's ignorance. Again, even in the absence of another cause to explain the phenomena incident at the time of dentition, it seems unnecessary to speak of dentition since the diagnosis must take into consideration the symptoms and not the supposed causes. There is, indeed, danger for the children, according to this view, so long as the incidents of dentition are not blotted out from the nosological formulas, because there will always be occasion for regrettable errors on the part of certain physicians.

The physiological reasoning and clinical experience, says Fleischmann, lead to the same conclusion, *viz.*: The excitation produced by erupting teeth cannot in any case bring about very serious incidents. The question naturally arises, says Kassowitz, how to explain all these contradictions in reference to the origin of infantile convulsions? The answer is very simple: at the time the theory of the dental origin of convulsions was formulated the veritable causes of convulsions in children were totally unknown.

I present herewith the following conclusions submitted to the faculty of Paris by the pupil of our colleague Dr. Magetot, Dr. Lévêque, and completely adopted by him :

1st. There has never been established in an incontestable manner any relation of cause and effect between dentition and the incidents attributed to it.

2nd. We meet in science with a great number of pathological facts to which dentition is declared a perfect stranger, though at first considered otherwise.

3d. Direct experiments, having for their object the wounds of the follicle and gingival borders in pups, have not produced any of the incidents ascribed to dentition.

4th. It has been recognized that all morbid phenomena observed in domestic animals the first year, corresponding to the incidents of infancy in man, are absolutely independent of dentition.

5th. The theory of incidents ascribed to dentition does not appear to me till now to have been based on any absolute proof.

6th. The incidents of infancy considered as dependent on dentition must be attached, in my opinion, to a group of phenomena little known as yet, and which may be designated by a general term without prejudicing anybody, incidents or diseases of the evolution of infancy.

One can admit with Magitot, Comly, Politzer, Fleischmann, Kassowitz, and the majority of children's doctors, that dental evolution in a well constituted child does not produce convulsions. But there often exist convulsions during the two first years of life. To what are they to be attributed? That is the difficulty. From an ethiological point of view, it seems to me, they can be divided now in two groups: *a*, those whose cause is known, and *b*, those of unknown origin.

—*Revue Internationale d'Odontologie.*

### DENTIST OF THE GREAT OPERA.

There is in Paris not only a theatre doctor but also a dentist of the Great Opera. The general public came to know of the existence of this remarkable post when "Monsieur le dentiste de l'Opéra" died a short time ago, and the Minister of Culture was to confirm the nomination of the toothpuller's successor.

The duties of the dentist of the Great Opera are to visit those of the members of the opera and ballet suffering from toothache, at their private residences, and still their pains. Though the office is not very

remunerative, yet as it gives free access to the stage, very many candidates applied for the position of the late opera dentist David. The choice fell on one Delalain, who had previously an intimate connection with the art. He was, many years ago, director of a theatre company in Elsass, and as he was also a dentist, he had printed on the tickets the following attractive "ad: " "The holders of the first seat have the right, between the acts, to have one tooth pulled by the director, free of charge." This drew! All together the artists of the opera will now have thirty-three doctors. The ballet ladies now ask besides for a "corn operator of the Great Opera."

—Zahnärztliches Wochenblatt.

---

#### "MENTON DE GALOCHE."

This anomaly usually appears during second dentition. The upper lip is turned backward, entering a little into the buccal cavity, while the lower is protruding. This is called *menton de galoche*, "underhung bite." Dr. Magitot, of the Medical Academy, President of the Paris Society of Stomatology, has made a thorough study of this deformity. He says it is curable up to the sixteenth or eighteenth year. He presented to the Society a girl of nine years, who showed at the beginning of the year a profile which could not be characterized otherwise than *menton de galoche*. It was hereditary, her mother, forty years old, showing the same anomaly. In ten days the young girl was transformed, and now her profile is normal. The treatment was simply orthopedic. Dr. Magitot used a fine, stiff, rubber pipe which is cast on the teeth of the lower jaw. She wore in the back a double inclined plane, shelved on both sides, which pressed forward in the occluding movements of the mouth the two upper central incisors. The apparatus remained, day and night, and was only removed when eating. Its action was quick, and the incisors straightened themselves. The application of the inclined plane produced no incidents. The duration of the treatment is proportional to the age of the subjects. While we can, let us destroy the *mentons de galoche*.

—Revue Odontologique.

---

A New York dentist says that the filling of teeth with gold has grown to such proportions that about \$3,000,000 of gold is consumed in this way every year, and that this consumption should enter into all calculations as to the supply of the precious metal.

## Current Thoughts.

---

In all proximate amalgam fillings, when the rubber-dam is not applied, just before filling pack a twist of cotton between the teeth well up out of the way of the cavity, then after filling and trimming, gently withdraw the cotton, and there will be no overhanging edges, or pieces of amalgam to irritate the gum.

*S. C. Slade, Millville, N. J.*

---

Having broken a drill well up in a lateral incisor, I poked it back and forth with an excavator for a long time, but could not even reach it with my foil carriers to get a hold of the broken part. I stepped to my motor and magnetized the excavator, then poked it a little more, and as I drew the instrument out the broken drill was protruding from the end. Try it, and see if it does not make you happy.

*L. C. Taylor.*

---

A lady, thirty-five years of age, called a few days since with the upper permanent cuspids unerupted. The temporary cuspids were still in place but loose. I extracted them, and put a shell crown placed over each first bicuspid with dummy cuspids and small band around laterals, not showing on labial surface any more than possible, as more preferable and comfortable than a plate. Fathers in dentistry, was this good practice?

*C. C. McCloud, Shreveport, La.*

---

Aristol is designed to take the place of iodoform. It is non-irritant and non-odorous. It comes in the shape of a reddish powder, soluble in ether and chloroform, and in some oils. The chemical combination is readily broken up, when iodine and thymol are liberated. An excellent root canal dressing may be made by rubbing up aristol in one of the essential oils, such as oil of cassia, or cinnamon.

*G. E. Hunt.*

---

Nerves are the media of transmission common to all the senses—to sight and to hearing, to smell and to taste, and we can discover no difference in their structure, either microscopically or chemically. Then, to what shall we ascribe the marked difference in the nature of the sense? Presumably, first, to the nature of the excitant; and, second, to the peculiarity of the apparatus which

serves to co-ordinate the excitant. Thus the impingement of odoriferous substances on the olfactory ganglion gives rise to the sense of smell, and the vibrations of the atmospheric air on the auditory fibers gives us hearing. The one evidences the chemical nature of the excitant, and the other the mechanical; and no reversal of order would suffice to demonstrate the character of the phenomena.

The vibratory action of light will not function the sense of taste, neither will sound agitate the sensory tissues of the eyes.

*W. S. Eliot.*

All ability signifies intelligence, and all inability, deficiency of knowledge. The most destructive example of inability is dishonesty — specially that form of ignorance which assumes that it is impracticable to be thoroughly honest. All the professional work that needs the excuse, "I guess that'll do," or, "We'll have to make it go," is nothing short of dishonesty, and is dangerous to the growth of the practitioner in view of its liability to become chronic. The very highest advice to pupil or practitioner consists in the instruction to carefully obey the dictates of conscience. In other words, when a case presents that you cannot diagnose, either seek counsel, or wait for the development when this can be done without jeopardizing the interest of the patient.

*Wm. H. Atkinson.*

Tri-chlor-acetic acid is found in colorless crystals, easily soluble in water or alcohol. It is a powerful caustic, quickly destroying the epidermis or mucous membrane. It is a product of the oxydation of hydrate of chloral by means of nitric acid. When diluted with water to three per cent., it is an excellent local astringent and stimulant. When it is used to soften and decalcify the seruminous deposits on the roots of teeth, a ten per cent. solution in water should be used. It may be neutralized by any suitable alkaline solution, like soda or magnesia, when it is desired to limit its action. It seems to have a peculiar power to soften and remove the sanguinary deposits on teeth, without injury to those organs, or to the tissues.

*A. W. Harlan.*

Two years ago a lady came to have a cavity on the lower sixth year molar filled; the cause of the cavity was chemical erosion. The cavity extended from the center of the grinding surface to the buccal surface of the tooth, so that the buccal cusp had been abraded one-fourth of the distance to the gum; the enamel standing all around a little higher than the dentine, forming a saucer-shaped cavity on an inclined plane. The dentine being exquisitely sensitive, it was decided to experiment. The dam being on, the surface

was dry, some of Welch's Phosphate of Zinc was mixed thin and placed in the cavity, and filled nearly full, then as it began to harden some soft amalgam was rubbed in with a burnisher, and then some harder amalgam added. The object in filling thus was the hope that when the filling failed the dentine would bear excavating and a gold filling put in. Results: Lady seen a few days ago. Filling in good condition, and being used every day, the same as though it was not stuck on.

*C. R. Taylor.*

First, thoroughly qualify yourself, be master of the situation, do good work, give care and attention and your very best skill to every case. Conduct yourself in that high-toned, moral way, that the public may see and know you to be a gentleman. If you do this, and are thoroughly qualified in your chosen profession, you will have the confidence of the people, and your success is assured.

*I. H. Grant.*

Any teacher who is not enthused by a love of truth stronger than the desire for financial success is not amenable to her clearest revelations. We must not pervert the Scripture that saith, "Seek ye first the kingdom of God and His righteousness, and all these things shall be added unto you," by seeking for the sake of the things that are to be added as the motive of our endeavor, rather than the righteousness (right doing), which is the fulfillment of the requirements of truth.

*Wm. H. Atkinson.*

Vitality is that mysterious something that distinguishes organic from inorganic bodies. We call it vitality, vital force, vital element, vital principle, the principle of animation, the living principle, life. We call it an energizing force, a power. Whether we define it by one or by many words, neither one nor all are adequate to bring out from the pale of mystery that which we attempt to define, and place it in a clear light of intellectual perception. It is mysterious, still, and incomprehensible as mind. Its incomprehensibility forestalls our efforts to gain a conception of its true nature, and renders unphilosophical any attempt at complete definition. Yet we have no difficulty with ourselves in this regard when we talk on the subject, for the conscious possession of life as a vitalizing force within us, compels the most ready intellectual assent to the fact, inexplicable as it is. When a man says by the force of inward consciousness, *I live*, he cares not who says, "You know not what you are talking about," and he scorns any attempt at an analytic solution of the fact. An appeal to consciousness is a sufficient verification of it.

*Dr. L. C. Ingersoll.*

The organ of hearing is not always located in the head. In the clam it is found at the base of the foot; some grasshoppers have it in the forelegs, and in many insects it is on the wing. Lobsters and crabs have the auditory sacs at the base of the antennæ.

OUR DIGESTIVE POWERS.—The human stomach possesses most wonderful powers of adaptation to circumstances. When Lieutenant Bligh and his 18 men were cast off from the *Bounty* by the mutineers in an open boat, they subsisted for 41 days on a daily allowance of one-twenty-fifth of a pound of biscuit per man and a quarter of a pint of water. Dr. Tanner, in 1880, fasted for 40 days, subsisting, it is said, on water alone, and Succì and other fasting men have since excelled this. Kaffirs, North American Indians and the "fat boy" in "*Pickwick*" may well be quoted as fearful examples of voracity, but even their gastronomic feats are exceeded by the full-grown Eskimo, who will daily eat 20 pounds of flesh and oil if he has the chance, while, on the authority of Admiral Saritcheff, a Yakut of Siberia has been known to consume in 24 hours "the hind-quarter of a large ox, 20 pounds of fat, and a quantity of melted butter for his drink."

—*London Public Opinion.*

EDITOR ITEMS:—I have been called in consultation with Dr. J. J. Keller, of Seven Points, Pa., in a case the like of which I believe is not on record in medical or dental practice. W. Morris Reitz, a farmer, aged forty-three years, had the inferior maxilla broken in four places by a wagon heavily loaded with apples and wheat, weighing at least two tons, running over the jaw. The accident occurred September 26th. The doctor endeavored by ligatures to bring the pieces together firmly, but was unsuccessful. October 6th Dr. Keller called me in consultation. After careful examination I took an impression of the lower and upper jaw. I took an impression of the upper jaw to enable me to articulate the lower teeth with the upper, and by that means get proper articulation and shape of lower jaw. I had to cut the model of the lower maxilla in sections. I then made a splint of vulcanized rubber, and October 9th placed the splint in position. The splint fitted to its place like a glove. The case is doing well. The jaw was broken on the left side in front of the angle, at the location of the first molar, which had been extracted; at the symphysis and on the right side in front of the angle at location of first molar, which had been extracted, and at the ramus, about half way between the angle and condyle, making four breaks and five pieces.

*J. R. Cressinger, Sunbury, Pa.*

For sensitive dentine, Dr. Bogue dips a pledget of cotton into carbolic acid, and then into powdered cocaine, and places it into the cavity. This obtunds sensibility enough to use granulated chloride of zinc with little pain. In ninety seconds the insensibility of the cavity is complete.

—*Ohio Journal.*

To fill roots the following is recommended by Dr. Ottolengui: Take floss silk and wax it thoroughly, after which dip it into chloro-percha and cut it into pieces about an inch long. These, when dry, give us gutta-percha cones which have a silk through them. They are readily packed into a canal, and the end being allowed to extend beyond the orifice of the canal, is readily grasped, in case of need, with a pair of tweezers, whereon the whole root filling is easily withdrawn. Where no trouble ensues, the root filling of this kind may safely be left in place, being quite dissimilar from cotton, as the silk fiber is thoroughly incased in gutta-percha.

There is one thing concerning antiseptics, says Dr. Abbott, which should be known. A few years ago carbolic acid was universally accepted as the best antiseptic in use. Now, those who use it in practice find it efficacious, while the experimenters claim to have seen organisms growing on the crystals of it. Investigation shows that when carbolic acid is properly diluted it destroys microbes, but the pure crystals are in a state that prevents their penetrating the substance of the organisms. It may be the same with bichloride of mercury. I never use that in the mouth in a stronger solution than 1 to 10,000. Some of these would-be authorities either falsify the record, or their experiments are crudely and incorrectly performed, for they get results that are not in conformity with established truth.

Dr. Thomas Fillebrown: It is not the organisms themselves that cause the trouble. They will perish in healthy tissue as quickly as in antiseptics. It is the dead tissues that afford food to the bacteria, and the ptomaines that are the result of their action. If in a surgical operation there be no dead tissue or foreign matter left, there will be no septicism. In experimenting, different men get different results, and this proves there must be something wrong. Any antiseptic strong enough to kill bacteria will injure the tissues. Cleanliness is all that is needed.

Dr. C. N. Peirce: The new remedy, tri-chlor-acetic acid, is an excellent cauterant. If a piece of wood dipped in it be thrust into an alveolar pocket, it will dissolve every vestige of any deposit. It has a happy effect on the tissues themselves. If it be thrust into septic roots it acts better than carbolic acid.

## Monthly Gossip.

DR. WM. E. BLAKENEY.

THREE HOSPITALS in Philadelphia are managed by women.

IT OFTEN happens that a dog without teeth barks the most.

DR. CATCHING condemns the persistent medication of the dental pulp.

THE BEST table for surgical operations now in use was invented by a woman.

ANYTHING THAT makes us take an unselfish interest in others makes us better.

THE MANUFACTURE of artificial India-rubber has lately been protected by patent.

DR. KIRK claims that he has never seen a case of mercurial ptialism. He is fortunate.

OF THE public school teachers in the United States, more than sixty-five per cent are women.

DR. CRAWFORD believes that the clinician should give first a diagnosis and then a prescription.

DR. W. W. WALKER believes the local and national societies should be brought into closer relationship.

APPEARANCES INDICATE that the profession will make a grand showing at the World's Columbian Dental Congress.

HE WHO comprehends law and the principles on which it is founded, says Dr. Barrett, is the only really practical man.

ACCORDING TO DR. J. S. MARSHALL, there are many surgeons who are altogether abandoning the use of antiseptics in operations.

IT IS SAID that the mines of the world produce twenty-five tons of gold every week, and yet the precious metal remains as scarce as ever.

"THE DECIDUOUS TEETH," says Dr. S. W. Foster, "are designed to fulfill the same mission for the child as the permanent set does for the adult."

DR. A. W. HARLIN believes that eucalyptus is an agent that is destined to take the place of iodoform, it being non-odorous and non-poisonous.

THE OIL of eucalyptus has grown into so much demand in Europe that over twenty thousand pounds were exported from California last year.

MERCURY AND IRON, according to Dr. J. D. Patterson, are the medicines which are generally supposed to work the greatest havoc with the oral tissues.

DR. R. R. FREEMAN says that the impression material should never extend beyond the margin of the cup if we would secure perfect margins to our impressions.

DR. C. E. FRANCIS utters a true and humane sentiment when he says: "Severe or heroic operations are seldom called for in our attention to children, and should be avoided as much as possible."

MISS JOSIE NELSON, of Minneapolis, was successfully operated on recently, and relieved of a plate of two teeth she had swallowed. The plate was lodged in the walls of the œsophagus, and firmly imbedded.

"MEDICAL AND DENTAL FACULTIES," says the editor of the *Dental Register*, "should exercise the greatest care and discrimination in regard to the admission of those whom they admit to their classes."

DR. ABBOTT contends that investigation shows that when carbolic acid is properly diluted it destroys microbes, but the pure crystals are in a state that prevents their penetrating the substance of the organisms.

THERE IS NOTHING in the pharmacopeia that can take the place of chloride of zinc. Its astringent, escharotic and stimulant properties, with its cleanliness and freedom from staining qualities, are not found in any other remedy.

DR. T. H. PARRAMORE uses sterilized sponge as a capping of exposed pulps. This, he claims, affords a nidus to catch and hold the bone-forming product of the pulps in position, instead of forcing the irritating nodules of osteodentine to protect itself.

A WRITER IN THE *Cosmos* contends that erosion is a distinct symptom of a constitutional disturbance, which has affected the secretions of the mucous follicles, so that they discharge mucus in which there is an acid present, which has an erosive influence on enamel and dentine.

DR. W. C. BARRETT doubts if there ever has been a case of re-infection of the tissues about a tooth that has had its roots filled after antiseptic treatment that cannot be directly traced to some imperfection in the manipulation, or to some infected pockets outside the tooth itself.

"HYPERTROPHY OF THE GUMS," says Dr. J. R. Bell, "is found mostly among two classes who are extremes in habit; one seldom,

if ever, brush or pick their teeth; the other clean theirs, and produce this affection through ignorance by the use of tooth powder, advised and sold to the victim by dentist or druggist."

"THE NEW REMEDY," says Dr. C. N. Peirce, "tri-chler-acetic acid, is an excellent counterant. If a piece of wood dipped in it be thrust into an alveolar pocket it will dissolve every vestige of any deposit. It has a happy affect on the tissues themselves; if it be thrust into septic roots it acts better than carbolic acid."

DR. WM. H. COOKE's method of making combination fillings of oxyphosphate and amalgam for molar and bicuspid fillings is to mix the former to nearly the consistency of putty; with this preparation fill the cavity about one-third full, and while in a plastic condition add small pieces of amalgam, and burnish with the engine burnisher.

THE BICYCLE, Dr. Brown thinks, will digest more fat meat and starchy vegetables than any other means of exercise known, and Gladstone is reported to have said recently: "I can only emphasize the fact that I consider that physically, morally and socially the benefit that cycling confers on the man of the present day is almost unbounded."

"MANY A PERFECT-FITTING PLATE," says the editor of the *Dental Practitioner*, "has been made almost useless by presenting two inclined planes on occluding teeth. It is loosened by sliding backward or forward down this inclined surface, while perfect mastication is effectually prevented. More dentures fail by bad occlusion than through a bad fit."

DR. E. T. DERBY has a good word for implantation. He says, "The impression seems to rest on the minds of many that implantations are temporary. Some time ago," he continues, "Dr. Younger implanted a number of teeth in one mouth. All succeeded except one, and in place of this I implanted another. That was more than six years ago, and they are all perfect to-day."

DR. W. W. ALLPORT believes that more caution should be exercised in the use of the mallet. He says that he can not do with it what he can do without it. "With the mallet," he adds, "and cohesive gold, every joint of the cavity being exposed, one cannot save teeth as with soft gold and only the sense of touch. The tendency of the mallet is to draw the gold away from the walls."

DR. W. C. BROWNE says that when the tissues are very hard he lines a portion of the surface, varying from the dimensions of one air chamber to the whole surface in extreme cases, with soft, flexible English rubber. In finishing up he scrapes till the rub-

ber is seen through the hard rubber surface. This method, he claims, will make the plate, upper or lower, adhere in the most difficult mouth.

DR. M. H. CRYER reports a new method of resection of the inferior dental nerve. It consists in cutting out a piece from the sigmoid notch, between the condyle and the coronoid process, till the inferior foramen is reached, when the nerve can be drawn forward and separated at two points. By this procedure a considerable portion of it can be resected without seriously injuring the bone, and more easily and effectively than in any other way.

"AN OFFENSIVE BREATH," says a writer in the *Ohio Journal*, "can originate from either decayed teeth, a catarrhal condition of the nose and throat, a disordered stomach, or from the lodgement and decay of food in the crypts of enlarged tonsils. By seeking the cause first, and then removing it by suitable means, you will bring about an almost certain cure." True enough, but why not have named the "suitable means" to use after finding the "cause?"

PROFESSOR PEABODY assumes that "with the known average of one death in one thousand from chloroform, one in ten thousand from ether, and one in one hundred thousand from nitrous oxide, we are not justified in resorting to them for minor operations." I would be glad to have the professor's opinion as to the probable number of nervous persons in one hundred thousand, who die by shock during minor operations without having inhaled either of the anesthetics he names.

---

"Fortune plays some mad pranks," said C. M. Chowen, addressing the Mendacity Club, assembled on the Southern sidewalks. "I was three times a millionaire and three times a pauper in one year. In 1863 an uncle in England left me a large fortune. I was living in Charleston, S. C., and engaged in blockade running. Half a dozen Yankee shells piled my fortune up at the bottom of the deep blue sea, and I went to Colorado and engaged in mining. I located one of the richest silver claims in the Territory, but did not know its value. I sold it for a trifle, went to Chicago and bought property on Wabash avenue. It did not look as though it would ever be worth a plate of soup, and I almost gave it away. A fraction of it was sold the other day for a third of a million. It is said that fortune raps once at every man's door. It has thundered three times at mine, but I did not know how to entertain the coquettish minx. That is why I am now making night trains and absorbing railroad sandwiches."

## Our Question Box.

WITH REPLIES FROM OUR BEST AUTHORITIES ON DENTISTRY.

[Address all questions for this department to DR. E. N. FRANCIS, Uvalde, Texas.]

**Question 63.** *Young man of twenty-six years of age still retains his lower centrals of the temporary set. They are wearing away, and he wishes something done to prevent it. Do you think it advisable to grind slightly and crown with gold? He has no laterals in upper jaw—in fact, only twelve teeth, and never had any extracted?*

If the teeth are firm in the sockets, would crown with gold.

*J. Campbell, Bloomington, Ill.*

If the teeth are firm in the sockets, and in a healthy condition, I should crown with gold.

*E. Ernest Murray, D.D.S., Boston.*

If the teeth are good, and firmly attached to jaw, I would advise crowning, provided his other teeth are strong and healthy.

*A. S. Rudolph, Carmi, Ill.*

This is a case where judgment should be used. Probably if capped with gold and platina the best results would be obtained.

*J. P. Root, Kansas City.*

The retention till maturity of one or more deciduous teeth is not infrequent, but the absence of so large a number of the permanent set makes this case remarkable. We may safely diagnose it as the result of imperfect nutrition. Would crown with gold caps, being careful to obtain perfect articulation, so as to avoid irritation. Would do as little grinding as possible. These teeth may last a long time.

*B. J. Hill, Akron, Ohio.*

**Question 64.** *Should we call the direction from the crown of a tooth, to the apex of root, up, without reference to which jaw the tooth is in?*

Would say up in upper and down in lower jaw.

*J. Campbell.*

Would say to the apex, regardless of its location.

*J. P. Root.*

Reference should be made as to which jaw the tooth is in, when speaking of direction from crown to apex of root.

*A. S. Rudolph.*

Should say from a common reason standpoint—that being generally better than peculiar individual ideas—in the upper up, and the lower down.

*E. Ernest Murray, D.D.S.*

The great fault of our language is the tendency to so corrupt our use of adjectives and adverbs as to make them mean opposite in different sentences.

*B. J. Hill.*

**Question .** *How would you prepare beeswax, so as to obtain a nice, clean, tough, hard, and good colored sheet for prosthetic work?*

A good, clean, plain, common, every-day beeswax does not require any preparation.

*J. P. Root.*

Have never paid any attention to making wax. Fowler's preparations are good enough for me.

*E. Ernest Murray, D.D.S.*

I think the Dental Supply Companies can furnish it better than a practicing dentist can make it.

*A. S. Rudolph.*

It is too much trouble, and time is too valuable to prepare wax for base plate when the depots furnish a superior article so cheap. For articulating wax, I buy pure beeswax of my farmer patients, and run into thin strips without any preparation whatever.

*B. J. Hill.*

[It does not pay a dentist to prepare his own wax unless he wishes to do it on a large scale, or has nothing else to do. If the subscriber wishes a full description we will be pleased to answer by a personal letter. *E. N. F.*]

**Question 66.** *Does alum potassium prevent warping of models, and make them harder? In using it, how do you prevent roughness of model?*

The use of alum prevents the expansion and uneven contraction of plaster to a certain extent, and favors easy separation of plate from model after vulcanization, thus saving labor in filing and finishing. A saturated solution should be made with boiled water—rain water preferred, and should be mixed when water is quite hot. The quantity (a very small per cent.) of this saturated solution to be added to water for mixing plaster is regulated by the quality of plaster used. The prevention of roughness will be found in next answer.

**Question 67.** *Does fine marble dust make plaster harder than salt? How do you use it, and prevent air bubbles?*

The manner of mixing plaster affects our models often more than the addition of chemicals. Too much water retards the setting nearly as much as the addition of chrome alum, or other chemicals, and produces a weak model, while too little water makes it porous. Salt makes a weak model, but hastens setting. The time required for the hardening of plaster is regulated by the quantity and temperature of water used—warm water hastening the setting without weakening the model. Coarse plaster makes strong models, but has more expansion, which is often regulated by the addition of marble dust or sand. To prevent bubbles and roughness, use plaster free from lumps, and stir till all bubbles are removed, and never pour on a dry surface.

**Question 68.** *Wisdom tooth extracted one week ago; roots not fractured; small piece of process came away with tooth; face swollen: gums inflamed, tender on pressure, and patient suffering much pain. Please advise treatment.*

We can give no positive treatment without a more definite statement of case. The trouble may be caused by the condition of forceps at time of extraction; by the wounding of surrounding tissue by the removal of the "small piece of process;" the alveola may have been injured, and there may be continued inflammation that existed at time of extraction. Often in cases of this kind, after treatment for some time without success, a small

piece of bone is absorbed (injured at time of extracting), or forced out on closure of socket, and the trouble disappears at once. Chloride of zinc, campho-phenique, nitrate of silver, aconite, iodine and glycerine, peroxide of hydrogen, sulphuric acid, warm water, and washes containing antiseptics are often used with success, but the selection of one or more of the above should be governed by a thorough diagnosis. Pressure early applied on the edges of the alveola will often relieve pain, and assist in replacing bone that is sprung from a normal position by the force applied in extraction.

**Question 69.** *How can a vulcanite plate be made smooth on the palatal surface? I have used silex, but object to the white deposit it leaves. Can thin tin be used, and, if so, what number do you advise, and how remove from plate?*

This question has been answered in back numbers of ITEMS. Collodion, soap, oil, etc., have been used by many to prevent rubber from adhering to the model, but we prefer tin for this purpose. No. 60 foil is used by many, and has the advantage of being easily removed from plate, but we prefer a much thinner foil for many reasons. No. 4 tin is difficult to remove without acid, unless it is well coated with collodion. The thick foil can be easily peeled off, but does not make a sharp model. Dr. Van Vleck, in answer to question regarding exercise for dentists, says: "Dumb-bells do the work; they develop the neck, chest, arms, wrists, and, in fact, the entire body." "I have my dumb-bells in my office, and use them every morning." The doctor sends two photographs of himself, with a hundred pound bell supported above his head in his right hand, and a fifty pounder in his left. and from the muscular development displayed, his arm measuring sixteen inches, we must acknowledge the dumb-bell a grand success, in this case at least. The above compares with the experience of a friend who has been exercising in this line for the past year. We do not wish to use the Question Box as a free advertiser, but would suggest the reading of William Blaikie's "How to Get Strong" (Harper & Brother) by all subscribers interested in Question 39.

Answers to questions for July number forwarded by Dr. J. P. Collins, of Boone, Iowa, were, through some fault of postmaster, forwarded to dead letter office, and did not reach us till this date. As the doctor has given very clear answers to the questions, we will publish his answer to No. 29, trusting it will assist many in deciding the puzzling question of upper and lower dentures.

"I consider you are right in calling either a lower or upper (full) denture a set of teeth. Of course, we call the natural upper and lower teeth one set, because they are a part of one organization; but in supplanting the natural teeth with artificial ones we have to make two separate and distinct appliances, each of which is complete in itself, and therefore I consider it perfectly proper to call each one singly a set of teeth, or both together a double set."

---

For a temporary filling, beeswax and rosin is good and cheap. Make it of the consistency of good chewing-gum—about 1 to 4, and let the surface of the plug be heated that is first to be passed into the cavity. It will stick, sure.

## For Our Patients.

### USE YOUR TEETH.

Use your teeth and you will pay your dentist less. The normal use of all our organs is necessary to their health. Disuse is weakness and loss. Notice how few there are at the table who use their teeth. Notice yourself, and see how little you use yours. The cook knows how lazy we are, and prepares our food accordingly. What work is left but to swallow it? We complain if the cook leaves us much more to do than that. No wonder our teeth gradually leave us. What would they stay for? As mere ornaments? Well, that is about as much as some of us are good for, any how. Even as ornaments, we make such a poor show, it is of little consequence how soon we go. Nature must have us in contempt when she sees how we neglect and abuse her, and run from her to pills and forceps.

"By the way she nurses them," said one lady of another, "I believe she just takes a pride in having for her companions lots of trouble." So it seems to us many take pride in being useless, delicate, complaining invalids.

Away with this lazy, sickly, effeminate way of looking and living—this expecting everything must be done for us—even the chewing into mince meat, and swashing into soups our food. Such people depend on anything the doctor can give them for health, instead of downright hard work and sensible living.

Stop gulping down your food, and ask your cook for something hard enough to chew. Make eating a recreation, and chewing a pleasure. You will be astonished to see how firm your teeth will become, and when once put in order, how they will continue so, and how vigorous your digestion will be, and how with delight your very blood will dance through your veins. The use of every organ should give us pleasure.

The only sense there is in chewing gum is the frankness with which you thus inform your friends, and the public generally, that your mamma has taken away your rubber ring too soon, and that your cook has given you no substitute. But this is about as dignified a practice as spending so much time, like little children, on the lawn, and "killing time" in a thousand senseless ways, instead of earning a living at some useful occupation. The gum is better than the dentist, and cricket is better than the doctor, but neither is as good as the extatic pleasure of a sensible, useful, normal life.

In filling teeth close attention to the work in hand will be gratefully received. Inattention, listlessness and laziness will be considered an unpardonable slight. Incessant talking is irritating, and especially conversation with others in the room. Stopping work to receive others, or giving them examination or advice is a proper cause for complaint; for a patient naturally feels that he is paying for the time he occupies the chair, and has a right to the dentist's close attention. The habit also of doing slowly what may be done rapidly, or spending much time in insignificant details or preparations which should have been completed before the main work was commenced, mortifies and gives a sense of injustice.

---

For the cholera there are many remedies. And still the victims die. The following is very simple at least, and within the reach of all. The author is so eminent, and his disciples in the use of the cure so many, we give it. It is the prescription of the celebrated Dr. Samuel R. House, of Siam. "I seldom lose a case of cholera," he says, "when called on before the stage of collapse, and my sole remedy is ten-drops of spirits of camphor in ten teaspoonfuls of water, one teaspoonful every fifteen minutes, or oftener, till relief is obtained." Many physicians claim that after the epidemic of cholera following the Crimean war, they had great success in the use of Rubini's tincture of camphor, in drops, on sugar.

---

A NEW VERSION.—The politician is my shepherd, I shall not want any good thing during the campaign. He leadeth me into the saloon for my vote's sake. He filleth my pocket with good cigars, and my glass of beer runneth over. He inquireth concerning the health of my family, even to the fourth generation. Yet, though I walk through the mud and rain to vote for him, and shout myself hoarse when he is elected, straightway he forgetteth me. Yea, though I meet him at his own office he knoweth me not. Surely, the wool has been pulled over my eyes all the days of my life.

—*Alliance Advocate.*

---

Medical Student—"I think, father, when I have graduated I will become a specialist."

Father—"What sort of a specialist?"

"I think I will make a specialty of ear diseases."

"I think you had better become a tooth specialist; man has only two ears, but he has thirty-two teeth that are always out of order."

—*Texas Siftings.*

## LAID A SNARE FOR THE DENTIST.

A richly dressed woman came into a dentist's rooms one day recently, complaining loudly of an aching tooth, and demanding instant relief. The dentist proceeded to wash his hands before examining the lady's mouth.

"There," she shouted triumphantly, "I've found the man I've been looking for. My good sir, I have no toothache. I was simply looking for a dentist who washed his hands. I've been to four this afternoon, and when I saw they did not wash their hands before touching my mouth I got out. You shall do my dentistry in the future."

She has proved a steadfast and valuable patron, so it behooves young dentists to be cleanly.

"The funniest experience of my business life," said a dentist in answer to a question, "was with a raw nursemaid, who was sent to me by wealthy people with instructions to put her teeth in perfect order.

"I was working on the first tooth, and had just injected water into her mouth when I said, as is customary, 'expectorate, please' I shall never forget the look on that girl's face, as, with her mouth full of water, she blubbered out :

"'Expect what?'

"'Spit!' I said.

"She spat."

---

"Look out!" said my patient. I looked out, and assured her I saw nothing wonderful.

"Oh, stop!" said she. I stopped looking out, but, of course, worked on.

"I can't stand it!" she ejaculated.

"Oh, I will stand it," said I; "you may remain sitting."

"But it hurts," she continued.

"Yes, the handle of my instrument is sharp angled, and—"

"Oh! it hurts awfully!

"Yes," I replied, "my hand is almost blistered, but I am determined to be thorough; thanks for your sympathy."

She threw her head back and looked up with a wild stare. "Ah," said I, "how pleased am I to see you look heavenward; should you look toward the other place I should fear you were suffering."

THE LAWS OF HEREDITY.—She came into the doctor's office, with her darling little dog in her arms.

"Oh, doctor!" she exclaimed, sinking into a chair.

"What is it, my dear madam?" exclaimed the doctor, excitedly.

"Oh, doctor," she wailed; "all of our family have weak lungs, and poor little Fido coughed four times this morning. Can you do anything for him?"

—*Detroit Free Press.*

"Which is the aching tooth?" inquired the dentist.

"This one," said the sufferer, as he pointed out the offender.

"Ah, yes; I see. Bicuspid."

"What?"

"Bicuspid."

"I'll buy nothing for it, doctor; just jerk the tooth out. Do you really think cuspids would cure it? What are your cuspids worth?"

—*So. Dental Journal.*

A SERIOUS CASE.—Old doctor (called in for consultation)—"Tut, tut! You'll worry yourself sicker than your patient if you're not careful. Don't be so anxious. It isn't good for your health."

Young doctor—"But isn't my patient dangerously ill?"

"He is. I told you three months ago you could only prolong his life; he can't be cured."

"My, my; oh, my!"

"Goodness me! The idea of a doctor allowing himself to worry that way over one case."

"Ah! but he's my only case. When he dies I'll starve."

—*Med. Bul.*

Sea Captain—"Yes, I want a boy, but think you look like a runaway. Now ain't ye? Didn't you run away from home?"

Boy—"Ye-ye-y-e-s, but I couldn't help it. They was going to send me to a dentist to have six teeth filled."

"They was, was they? Well, I'd 'a'run off, too. I don't believe in fillin' teeth."

"N-o, sir; I don't either."

"Of course not. You come on board with me, and if anything's wrong with your teeth the carpenter can take 'em out with a monkey wrench."

Boy went home.

—*Good News.*

"Be me sowl!" exclaimed Mrs. Finnegan, "Everything is blamed on the poor Oirish nowadays. Wud yez belave it, Pat? They do be sayin' that an Oirishman gave the people in the Sout' the yaller faver—a felly be the name av Mike Robe." —*America.*

## Items.

---

Constancy in labor will conquer great difficulties.

---

If we would govern our patients we must govern ourselves.

---

Speak as little evil of a competitor as possible; but be quite ready to do him a good turn, or say some kind thing of him.

---

It is well that most of us are capable of giving good advice. It comes with better grace, however, when we are a living example of the advice we give.

---

We cannot jump into a successful practice. It is very difficult to walk into it by stepping into another man's shoes. It is by the patient plodding through difficulties that we are brought to permanent success.

---

A boy aiming at a target sighted his arrow directly at the bull's-eye. Every time it fell below it. "Aim high," cried a gentleman. "Allow for depression." The lad aimed above the bull's-eye and hit it. So we must do in all the work of life.

---

We do not expect a crop of corn without much cultivation. Simply throwing the seed on the ground is not sufficient. So it is not enough that we put good and useful thoughts in our mind. They must be cultivated with great care to bring forth ripe, luscious fruit.

---

Nothing is worth doing that is not worth doing well. Neglect the trifles in building and the whole structure will be defective, but if the details are perfect, the structure will also be perfect. This is an aphorism; and in applying it to our neighbors, we know it will prove true every time, but in applying it to our own life, we work as though we thought we might be an exception to the rule.

---

Care in avoiding pain is an evidence of progress in our profession. The time has been when it was foolishly thought that to be stoical showed evidence of experience and skill; and to be sympathetic, showed inexperience and weakness. Now, indifference to the pain inflicted is sure to deprive the dentist of his best patrons, and to exclude him from that advanced position in the profession to which we all aim by a common ambition.

Bone and tooth material is found principally in the gluten of food. Starch contains but a small proportion of the phosphates.

---

Dr. W. N. Morrison, of St. Louis, says he has implanted a large number of teeth during the last seven years; and of those which have been in five years or over, he has not lost more than 20 per cent.

---

A physician brought me a patient with a chronic running sore on the neck. "It has baffled my skill," said he, "and I have heard you are skilled in scrofulous diseases, of which, I believe, this is one." The removal of an offensive tooth cured it at once.

---

It does not exhibit skill to kill a healthy tooth-pulp because it becomes exposed. There are too many ways of preserving it alive and permanently filling the tooth to excuse its destruction. In your practice why be behind the best dentists in the land? The facilities for improvement are now so abundant you may as well stand abreast of the most advanced.

---

Softness in gold foil is appreciated more and more; and hardening it by passing it through a flame when using it is more and more depreciated; while the existence of softness and cohesiveness in the same foil is increasingly valued by those who become acquainted with it. We are glad it is procurable, and hope no dentist will be satisfied till he finds it.

---

Dr. Abbott says if there be anything on earth that can destroy organic life, it is the bichloride of mercury. All the world is united in this belief. It is the standard antiseptic in all surgical practice of to-day, and there is not one present, probably, who has not personally witnessed evidences of its power. It will remain a standard, notwithstanding the reports of this experimenter.

---

A lady came to me with severe pain in a lower molar, with gum swelled and extreme soreness. Nothing would do but the removal of "that pesky tooth." There was certainly no abscess; we could find no cavity even. The tooth was not loose, and, to all appearance, it was a sound tooth. She persisted that she could feel a cavity between the teeth that we could not find. Had we heard to her importunities we should have extracted a sound tooth. The removal of a tooth brush bristle lodged between the root and the alveolus removed the trouble.

The prevention of disease is far more to our credit than any skill in curing it.

---

First, be ambitious to do your work well, then to see how quickly you can do it.

---

An unapproachable, stiff, forbidding air is repellent. A sensible patient soon discovers the difference between a dignified reserve with a manly bearing, and a cold, hard rigidity of assumed independence.

---

Watch the effect of the brush or powder on your patients. While some do not use the brush enough, others use it too much, and produce a groove across them that is very injurious. Stiff brushes and harsh powders are as bad as neglect.

---

Sharp, well-formed instruments, are a great saving of strength to the dentist, and of pain to the patient. There is no excuse for having instruments otherwise. The dentist who is too indifferent to provide himself with the best instruments, and too lazy to keep them in good condition, is generally too shiftless and too unskillful to be depended on in any important operation.

---

Disregard of comfort of the patient is a needless fault. We place the patient in almost any position of awkwardness and discomfort for our own ease, without seeming to think the patient has any rights that we are bound to respect, and sometimes when our own comfort does not make it necessary, the inconvenience is the result of mere thoughtlessness.

---

Five new dental schools were started last year, so that we now have thirty-eight, which last year graduated 1,483 students. Surely we are getting to be a nation of dentists; and yet not as fast as this would indicate. How many will be practicing twelve months after they open their offices? How many will open an office at all? It is said not more than one in ten who enter merchandize succeed. It is so in almost every calling which demands extra skill or other mental endowment. We cannot, therefore, estimate the augmentation of the dental profession by the number of graduates. Besides, of those who do take a permanent place at the chair, nearly half as many will retire from old age, change of business, death, or some other cause.

A stern, haughty, self-conscious superiority is disgusting. Real greatness is modest. While our manner may show self-confidence in our ability, there should be that conciliatory spirit and civility of manner which puts our patients at ease with us.

---

There is nothing in the pharmacopeia that can take the place of chloride of zinc. Its astringent, escharotic and stimulant properties, with its cleanliness and freedom from staining qualities, are not found in any other remedy. It will do its work more kindly than sulphuric acid.

---

Not using available means for lessening hypersensitiveness of teeth gives unnecessary dread of any future dental work. We cannot here speak in detail of what these are. Every dentist who truly sympathizes with his patient will find himself more and more successful in finding and using them.

---

Dentist E. C. Bronson was found dead in a cell of the police station at Schenectady, New York, the other day. A patient died in his office while under the influence of chloroform about two weeks ago. Bronson was so worried over the affair that he took to drinking heavily, ending in his arrest and suicide.

---

It is a shame and a disgrace that anything referring in our dental discussions to bad habits or good morals is ridiculed. Of course, such ridicule exhibits the character of the fountain from which it comes, but this only makes the shame the greater. Some of our leaders who are punctilious for dignity, estheticism, and refined surroundings and character in association with their patients, will sometimes in our social gatherings and conventions, exhibit anything but gentlemanly conduct, and take offense if the subject of tobacco, intoxicants, or clean morals, are even alluded to.

---

We believe the best way to manipulate even the best amalgam, is to mix it quickly into a stiff paste, and then to wash it in soda water or alcohol, drying it by squeezing it in a double thickness of cheap, unstarched linen. The smaller amount of tin used in some of the richer alloys, make washing less necessary; but all are made brighter by it. After some experience, squeezing superfluous mercury out should be generally unnecessary, for the right proportions should be judged without difficulty. If this cannot be done it should be squeezed out, but the paste is not so good for it. Also, some make poor fillings with good amalgam by using after it begins to set. Adding a little mercury will make it soft, but it is not so good.

Dr. Louis Ottofy says it was unfortunate that Dr. Younger implanted teeth as indiscriminately as he did, for he thus invited failures. This he did not probably do in private practice. I have lost several cases in which the enamel cracked off. Now, I always cut off the crown, and attach a Logan crown, thus making a stronger tooth. Nearly all my early cases were failures, but this was because of my lack of knowledge. Average implantations will last from five to seven years, and then others can be inserted in their places.

---

The profession of dentistry is undergoing a rapid change. It is no longer enough to know a few elements of its studies, and to have a smattering of its practice. There was a time when to be of the profession was by no means to be a professional gentleman. This was a misnomer, except as applied to professional teachers and many of these were hardly professional, either in their teaching or conduct. Yes, there is a wonderful sifting going on in our profession, and a severe scrutiny of those who would enter. What a learned, dignified, asthetic, aristocratic body *we* shall be by and by.

---

Bichloride of mercury has for a long time been the chief reliance in surgery for producing an aseptic condition. Koch recommended it as the most efficient of all known disinfectants, in 1881. Charles T. McClintock, A.M., of the University of Michigan, has lately performed some hundreds of experiments. His conclusion is that Koch and others based their opinions on faulty observations, and that the high rank heretofore given corrosive sublimate as a germicide is without warrant. While it has no great germicidal powers, it may be a valuable disinfectant. La Place long since called attention to certain characteristics of mercuric chloride, which would seriously interfere with its germicidal action.

---

The composition of gold solder must depend on the alloy of the plate. A good solder for coin gold is 2 dwt. gold, 9 grs. copper, 3 grs. silver, and 1 gr. zinc. With care 18 karat gold can be soldered with this, and it is better than a heavy grade. A softer solder may be made of gold 2 dwts., copper 8 grs., silver 5 grs., and zinc 5 grs.

A good silver solder is 1 part of zinc, 3 parts copper, and 16 parts silver. One flowing much easier may be made of zinc 5, copper 8, and silver 48.

It is singular that copper, which requires a much greater heat to melt than silver, will, when added to the silver, cause both to melt at a lower temperature than either will melt when alone.

## Notices.

---

"The Rise, Fall and Revival of Dental Prosthesis," is the title of a neat little volume by Dr. B. J. Cigrand, Chicago. Sold by The Wilmington Dental Company.

Dentistry has not much of a history, yet Dr. Cigrand makes the most of it. It is interesting to see how much can be written of ancient dentistry. The doctor really gives it an historical lore before history itself, by digging from the very graves evidences of its flourishing away back in the mistic ages. Coming down to more modern times, we are given a wide range of view. Dentistry as it has been and is practiced in all civilizations is described, and, *of course*, America is given chief place. The book is a nice thing to have in the dental library, or to lay on the center table of the reception room.

---

PRIMITIVE DENTISTRY.—Dr. George R. Friederichs, of New Orleans, has a set of teeth which was made in 1825, by Dr. Risseau, of Louisiana. It is an interesting specimen of what dentistry was in its early days. The set is a full one, the teeth being made on a base constructed from a tusk of hippopotamus. The bicuspsids and molars are of the same material, the incisors of the old French make of porcelain, called the French bean, because of their being of one shade in color. They are backed by gold, and fastened to the base by rivets. The upper and lower set are joined together with a spiral spring. It is said they were worn with perfect comfort during the patient's lifetime, a period of thirty years.

---

"Dental Students' Note Book on Dental Anatomy and Physiology," by James F. Rymer, England, is a valuable little work. It is really an epitome of these subjects. Of course it will not take the place of extensive treatises, but when these are mastered this little brief will be found an admirable reminder of what the larger works have taught. Ash & Sons, London.

---

At the last annual meeting, August 4th, of the California State Board of Dental Examiners, twelve applicants were examined, of which two were successful. The following officers were elected: J. L. Asay, M.D., of San Jose, President; and J. D. Hodgen, D.D.S., of San Francisco, Secretary.

## Editorial.

### A DESERVED COMPLIMENT.

There is, perhaps, no more prominent and successful mechanical dentist living, than Dr. L. P. Haskell, of Chicago, whose portrait appeared in November *ITEMS*. (We hear a whisper,—“Is he dead?” No; but as an unusual exception, we compliment a man while he lives.) He has been in the profession as a prosthetic dentist for forty-seven years, and is not old yet; we judge so from our own feelings at sixty-six—just his age. Though Dr. Haskell has but one eye, it can see farther through a difficult case than a dozen eyes can in the heads of others.

We were in the office of Dr. W. W. Allport, in Chicago, when Dr. Haskell had charge of his mechanical department. A case was presented, puzzling both of us. “Oh, well,” said Dr. Allport, “we will soon settle that;” and putting his mouth to a tube he called down Dr. Haskell. “I wish you would see what can be done there,” said Dr. Allport.

A few minutes later Dr. Haskell said: “I see,” and took charge of the case. While we were going down to dinner soon after, I said, “You gave up anxiety in that case very easily.”

“Oh, yes,” replied Dr. Allport; “what Dr. Haskell can’t do there is no use talking about, and as surely as he accepts a case I am pretty sure of success.”

He was with Dr. Allport eleven years.

Ah, that fruit farm at St. Joe may have been a good investment for experience to Dr. Allport, and for health to Dr. Haskell, but, financially,—my! Was it not fortunate that the former could spare fifteen or twenty thousand dollars and not be bankrupt? We have seen many a tooth cavity that yielded the doctor from thirty to sixty dollars, and a mouth that dropped into his pocket eight hundred to a thousand. But some dentists can’t make money as easily out of a peach orchard.

Probably Dr. Haskell has done the most serviceable work of his life about four years ago, when he started the first Post Graduate School of the dental profession, for instruction in prosthetic den-

tistry. This school numbers among its students practicing dentists from nearly every State in the Union ; from Canada, Mexico, Germany, Holland, Australia and New Zealand. Giving the students his personal attention, and with methods simple and sure, he has succeeded in awakening much enthusiasm among them in their work, and enabled them to enter on new lines of work with great success.

Dr. Haskell was one of the first to purchase an office-right for the use of Allen's Continuous Gum Work, for which he and his partner paid \$150. This was in November, 1851. This work he has continued to make ever since, and recently on a visit to Boston, found still in wear one of the first sets he made forty years ago, and still doing good service without repair.

---

#### IT IS STEP BY STEP WE CLIMB.

We cannot jump from childhood to manhood, from the elements to wisdom, from penury to wealth. If we attempt it we get hurt, and the rebound is discouraging. To become better, wiser, and more successful, we must be willing to rise step by step.

In this gradual progress it is a wise provision of Providence that we cannot see very far in advance of us, and that we may take pleasure and be contented in every condition of life ; little things satisfy us till we see the greater ; we think our present is good till we get a glimpse of the better ; we feel comparatively comfortable in poverty and ignorance till we are tickled by something above them. If we are ambitious, we are continually seeking to better our condition ; but in our steps from one to the other we find so many things to learn and to acquire, and so much to obstruct our way, that our course is necessarily slow. It is step by step we climb.

That mother is not wise who gives her little darling the well-dressed wax doll as its first object lesson. It is too complex. She gives it first the simplest doll of rags, then, perhaps, one of stuffing, then of rubber—all naked and homely in the eyes of the larger children, but to the baby, the best in all the world. As its faculties expand, more elaborate things attract its attention.

The boy who advances too rapidly as an apprentice is seldom

efficient, though he may be officious. Better by far put him back to the first rudiments of the business, and keep him there till they are mastered, then, as he comes up slowly and thoroughly, he will become skilled, apt and acceptable.

I was once apprenticed to a cabinet maker. He gave me so many trifles to do, it seemed like play. Why, he would make me plane a board with one plane, and then with another, till the board was all planed away. He would put me to sawing, with cross-cut and slit, till I had made small pieces of many good boards. He would require me to take as much pains in making a box that was to be thrown away, as though designed for a treasure. And while I was doing all these trifling things he would come around and instruct and help me as gravely as though I was doing very important work. By and by, he astonished me by bringing to my bench a lot of patterns.

"Here," said he, "you see these patterns. When put together they make a washstand. Now go up into the store room and bring down a completed one, and see how well you can imitate it. Yonder is a pile of rough boards, from which to make it. Let me see what a good washstand you can make."

I was proud enough, and went to work with a will to make my first washstand. But I made many a crooked line and spoiled many a piece of board. Finally, I had before me a whole washstand. And I had made it all myself. (Though I must say, it was by many a hint, and stroke of improvement here and there, by the boss.) That was one of the proudest days of my life. With feelings of exultation, I went to my master, and said :

"Well, sir, come and see my washstand."

He pronounced it perfect. There was not a part lacking. Years afterward I wondered how he could have said that washstand was perfect, for it wobbled, was askew, the legs were not even, and the finishing was rough. But I suppose he meant it was perfect as a first washstand. "Be ye therefore perfect, even as your Father in Heaven is perfect"—that is, perfect in our sphere, though that sphere may be very humble.

"But," said he, "Tommy, it might be you could improve it. Take that up to the paint shop, and make another."

"My! the idea that my washstand was going to be prepared for sale. "I'll keep tract of who buys that, and tell with pride who made it," I said to myself.

Well, I made another washstand. Very kindly my employer came around now and then, as he had done when I was making the first, and pointed out defects, and suggested improvements. But this one was certainly a fine washstand. And Mr. Simpson congratulated me on my success.

"Now," said he, "go up-stairs and bring down the first, and let us compare them."

"Then it is not sold yet, nor even painted? I wonder what he has kept it there so long for." So I mused as I went up-stairs. I had the curiosity to look it over in the light of my advanced experience; and I must say I saw defects I had not seen before. I brought it down, saying, "I think, Mr. Simpson, it is hardly as nice as I thought it was."

"Well, now, look them over together," said he, "and in a few minutes I'll be back."

"I should like to make some of these parts over," I replied, when he returned.

"All right; do your best," he said, and again left me.

I did do my best; and my improvements were creditable; and so said the good-natured Mr. Simpson. And both were sent up-stairs. Then he surprised me by saying:

"Now, Tommy, get out the pieces for a half dozen washstands, and let us see how you can improve on both you have made."

I really thought I was becoming a perfected cabinet maker; and that this showed my employer thought so too. But he now took a little of my pride and egotism out of me.

"Tom," said he (and when he said Tom instead of Tommy, I knew something serious was coming), "think twice before you cut once. Measure carefully, before you put your saw to a single board. You have wasted much fine lumber and time on those first washstands. I want you to be very economical this time, and yet let me see if you can't get along a little faster."

Well, I made the six in less time I had made the two, and every piece fitted nicely. Then I made another six still quicker and

better, and then another six, till I was so tired of making washstands, I never wanted to see another. But I now see I was learning to make everything by learning to make one thing well. When next he put me to making bureaus, I was astonished to see how at home I was in the use of tools, and in making my patterns, and in doing everything accurately. But it was all step by step.

Susie Best helps me out beautifully by saying :

How slowly up the steep we climb !  
We take but one step at a time ;  
So small a step that scarcely we  
Seem climbing up perceptibly.

So near the base below appears,  
We sometimes think, with tired tears,  
Tho' all our energies we strain,  
The summit we can never gain.

But not for long yield we supine,  
For on the road we see the sign  
Left by the wounded feet of those  
Who, like ourselves, the rough road chose.

And from the far-off heights where they,  
Like bay-crowned victors, stand to-day,  
We hear an echo—"Courage keep,  
*We* toiled as slowly up the steep."

---

For a long time Philadelphia has justly boasted that she has given us the biggest exhibition of industries and art this country has ever seen. But how in the shade we are now putting it by our Chicago affair? My, what a big people for big things, and a big show of them, we are! In our rush for big things, and to make ourselves big with them, some are crushed; but the multitude rush on to the next, crying hurrah! We can beat the world in great rivers, great lakes and great prairies, great mines, great farms and great railroads, great men, great houses and great manufactories, great corporations, great millionaires and—everything! It is a great country, and every year we are making it greater. Well, in this next great show, we dentists must try and make ourselves and our profession great. Of course, *we* are a great profession; only the world don't know it. We'll show how big and important we are when we get to this big show. All dentists will please wear their best bib and tucker.

Commencing with the next number there is a rich feast in reserve for the readers of the *ITEMS*. Two thousand five hundred dollars have been spent by the publishers in beautiful colored plates descriptive of the diseases of teeth, etc. They exhibit the highest attainment of art and accuracy in this direction. These, of themselves, will be worth much more than the subscription price of the magazine. Each of these plates will be minutely described by four to six pages of text tersely written.

Thus each year, for several years, has the *ITEMS* been improved in text, quality and quantity, without any additional cost of subscription. No wonder it grows as no other dental journal has ever grown. We have now passed all competitors, and take the lead in circulation. And do we not in the amount and value of the real practical facts we present to our readers?

"I take three dental journals," said a prominent dentist to me, "and I take them quite as much for their advertisements as for what is generally called their reading matter."

I thought it a singular assertion, at first, but I am not sure but it was an intelligent remark.

"Why," said he, "the advertisements are generally the first part I read; for I am more interested to know what new thing is put on the market than what this or that one knows of manipulative processes. I buy many things that prove useless in my hands, but some things I get are worth everything to me, both for what they are and for what they teach me."

---

An Oak Hill, Litchfield, man had an aching tooth out in a novel manner. He was removing a yoke from a cow, when the animal threw up her head, striking the bow-pin, which he held in his hand, against one of the lower front teeth, knocking it out. It happened to be the one that had been aching.

---

Successful men assure us that genius is merely a capacity for hard work, of patient and unlimited drudgery. Some young men are unwilling to accept the drudgery of the slow and painful acquisition of skill and the mastery of details of doing small things well, which are inseparable from accomplishing success of any kind.

## LEAD AS A FILLING.

Some years ago we bought of a manufacturer of "tin foils" a supply for our dental depot. It was very soft and cohesive, so that we got up quite an extensive trade in it. Numbers as high as 40, 60 and 120 could be used advantageously. About eighteen months later we were expatiating to the manufacturer on its fine qualities for filling teeth, and how popular it was becoming with dentists. We asked him if there was any secret in its manufacture. Said the superintendent, "We make no tin foils. They are lead foils covered with tin." We were amazed, not only at our consummate ignorance, but in the fact that in that ignorance we had been selling it to dentists for pure tin. For some time thereafter we informed dentists buying it of its real character, till most abandoned its use. "You are doing foolishly," said the manufacturer one day. "We did not intend to deceive you, but supposed you knew that all ordinary 'tin foils' were rolled out of bars of lead, with a layer of tin on each side. Why, your competitor of—dental depot buys of us a hundred pounds at a time, and they declare them to be the most popular tin foils they sell."

So far as we have learned no injury has ever come from its use, and it is certainly easily manipulated and remarkably cohesive, and it makes a dense, perfect and durable filling.

Who has had experience in filling with such foils?

---

It is the courageous that win. "Faint heart never wins fair lady;" and so the faltering, timid, discouraged dentist never wins an enviable position. Stand with firmness, walk with dignity, speak with clearness; mature your judgment by close study and definite experience; be ready to speak and act promptly, and to do the most difficult and disagreeable thing cheerfully; bear the most disheartening and disastrous circumstance gracefully; in everything, and at all times, and under all circumstances, show yourself a man, not a baby. If you are really what you should be, this very attitude will give influence and success; but weak knees will give you failure. Suppose your income, for the present, is not sufficient,

live on less, if it is only potatoes and salt, with a family bravely sharing it, by and by you can live on the fat of the land; suppose you have difficulties, overcome them, and bless God for the experience; suppose competition is severe, be the best workman, show faith in yourself by maintaining fair prices, and thus command the best patrons. But, whatever overtakes you or hinders your progress, don't be discouraged. Fight manfully, master your situation, win!

---

The Post-Graduate Dental Association of Chicago should be better known. It is doing a work that not only supplements the regular college course, but gives unexcelled opportunity for those dentists who have never attended college, but who are ambitious to attain the front ranks of the profession. We wish such an opportunity for practical teaching had been in my younger days; our old shoes should have gone to the junkman, and every vestige of our worldly possessions should have been sacrificed for the privilege of attending such a school. Why, for two years at college we lived on a dollar and a half a week for food, coal, light and room rent, and lived happy; though, sometimes, not having but twenty-five cents left for baked potatoes and salt or mush and molasses; and we would have done it again to attend such a school as this. Write to the President, Prof. R. B. Tuller, 946 Madison street, Chicago, and learn more about it.

---

It is not the amount we read or even study that gives us wisdom, but what we digest. Wisdom comes from knowledge, but through a process quite different from mere gathering, as with knowledge. Wisdom is knowledge planted, cultivated, grown, matured, till it brings forth perfected fruit. Much of the knowledge we gather is wasted, and is better wasted than saved; much of it is housed, but remains only seed; it may be good seed, but unused for years—perhaps never used. Merely cramming the mind with facts is of little importance; it may be a detriment. It

is what we use that benefits. We can hardly call them our own till they have become vitalized by the transforming power of the mind's activity, which we call reasoning. Some persons of limited "education" startle the world with special wisdom. They seem to know but little, but what they do know they know thoroughly, and make a good use of. With them knowledge has grown into wisdom, and wisdom is grown to be things,—things admired for their sterling qualities.

---

### THE OLD YEAR ENDS.

Swiftly moves the rolling year. We hardly enter its busy rounds before preparing for its close. The numbers end. The twelve *ITEMS* are complete. Printer, for better or for worse, bind the volume. Place it with the series. Let us see,—what is the number? Is it possible you can write Volume XIV?

Such is time. Such is life. Such is the sum of our activities, and usefulness and enjoyments; our cares, our troubles and our anxieties,—all our labor under the sun. How brief! 'Tis but a tale that is told. Life is but a day's march. Yet how often frivolous, useless, objectless,—too often "like children in the market place," playing funeral or wedding, while within our reach are golden opportunities, great possibilities, acres of diamonds.

But at best, this life is our childhood, the life to come is our manhood; this is our tutelage, that our graduation; this our discipline, that our triumph. Here we are bound, limited and circumscribed; ignorant, erring, blundering,—only learning. There we shall be free in our powers, limitless in our sphere, boundless in our development.

It is well. I would not live always here, I ask not to stay. Close the volume. But remember, when the bells of the night toll the old year's death, the joyous jingle just over the hills shall dance the new year in. Fly, swift wings of the night. Ha, ha! The angel of the morning is already brushing away night's gloom with his halo in the east. All hail the golden morning!

Vol. XIV. DECEMBER, 1892.

No. 12.

# ITEMS

OF

# INTEREST

Published by  
**THE WILMINGTON  
DENTAL  
MANUFACTURING  
COMPANY.**

1413 Filbert Street, Philad'a.

A MONTHLY  
MAGAZINE  
OF  
**DENTAL ART, SCIENCE  
AND LITERATURE.**  
T.B. WELGH, M.D.  
EDITOR,  
VINELAND, N.J.

**NEW YORK, CHICAGO, WASHINGTON,  
WILMINGTON.**

# CONTENTS FOR DECEMBER, 1892.

## THOUGHTS FROM THE PROFESSION.

PAGE.

Honorary Degrees .....	705
Room Enough at the Top .....	706
Southern Dental Association .....	708
Fitting Collars to Teeth..... <i>W. K. Slater</i> .....	711
Arrangement of Artificial Teeth..... <i>R. M. Walker</i> .....	713
A Perfect Filling .....	715
Dr. W. H. Dwinelle..... <i>W. W. Allport</i> .....	716
American Dentistry..... <i>C. W. Eliot</i> .....	717
Abscesses..... <i>Dr. Ottolengui</i> .....	718
The Human Jaw and Teeth .....	719
Systematic Reading .....	720
The Teaching Element in Congresses .....	721
Nitrate of Silver for Decay and Sensitive Teeth.....	722
Is the Death Rate Increasing?..... <i>J. W. Wassall</i> .....	723
Statements of Patients..... <i>C. E. Latimer</i> .....	724
Diseased Antrum..... <i>G. L. Curtis</i> .....	724
Syncope and Asphyxia..... <i>G. H. Wilson</i> .....	725
Extraction of Sixth Year Molars..... <i>W. B. Conner</i> .....	728
State Boards .....	731
Pental..... <i>G. E. Hunt</i> .....	731
Amount of Beer Drank.....	731

## OUR TRANSLATIONS ..... 732

Phlegmonous Abscesses—Incidents of Dentition—Dentist of the Great Opera—"Menton de Galoche."

## CURRENT THOUGHTS..... 738

Amalgam—Extracting a Broken Drill—Unerrupted Tooth—Aristol—Use of Nerves—Tri-chlor-acetic Acid—Chemical Erosion—Vitality—Broken Jaw—Sensitive Dentine—Root Filling—Antiseptics.

## MONTHLY GOSSIP..... *Dr. Wm. E. Blakeney*..... 743

Antiseptics—Eucalyptus—Taking an Impression—The Deciduous Teeth—Mercury and Iron—Euophen—Our Gold Mines—Carbolic Acid—Severe Operations—Chloride of Zinc—Sterilized Sponge—Erosion—Antagonizing—Artificial Plates—The Bicycle—Combination Fillings—Implantation—Fitting Plates—Offensive Breath—The Mallet—Resection of Nerves.

## OUR QUESTION BOX..... *Dr. E. N. Francis*..... 747

Retained Temporary Teeth—Which is *Up* in a Tooth—Preparing Beeswax—Alum is Plaster—Marble Dust in Plaster—After Pain in Extracting—Smooth Surface for Rubber Plates.

## FOR OUR PATIENTS..... 750

Use Your Teeth—Cholera Remedies—A New Version—Laid a Snare for the Dentist.

## ITEMS..... 754

Jumping Into a Practice—Doing Each Thing Well—Avoiding Pain—Implanting—Sore in the Neck—Killing Pulp—Bichloride Mercury—Look for the Cause—Watch the Effects of the Brush—Sharp Instruments—Our Colleges—Chloride of Zinc—Sensitive Teeth—Morality in Our Discussions—Washing Amalgam—Implanting—Our Progress—Gold Solder.

## NOTICES..... 759

Our Improvements.

## EDITORIAL..... 761

A Deserved Compliment—It is Step by Step we Climb—The World's Fair—Lead as a Filling—The Courageous Win—Post-Graduate Association—How We Learn—The Old Year Ends.

## OUR TERMS.

The terms for ITEMS OF INTEREST are \$1.00 per year in advance in the U. S., Canada and Mexico, and \$1.50 to Postal Union countries. Single numbers, 15 cents. Each volume begins with January of each year. Subscriptions will be received at any time, to date from January or July. Advertising rates will be made known on application. Money may be sent in registered letter, by postal money-order, express money-order, or bank draft.

Address all business communications to THE WILMINGTON DENTAL MFG Co., 1413 Filbert St., Philadelphia, Pa., U. S. A.

Editorial communications to T. B. WELCH, M.D., Vineland, N. J.

# A NEW DEPARTURE.

IN

## DENTAL JOURNALISM.

Our Prospectus for 1893.

---

Nothing worth knowing has ever been gained in any department of either science or art without painstaking effort or a spirit of enterprise, often demanding the greatest sacrifices; and successful journalism has won its distinction by making those qualities a permanent feature of its marvelous growth and subsequent influence.

Science, Art  
and  
Journalism.

We have been conducting our magazine on the lines of progress, and in announcing our new departure for the great "Columbian" year of 1893, we are aware that we serve not only the cause of progressive and enlightened dental journalism, but we also present something which is, as well, a departure in dental science and art.

New Depart-  
ure in  
Dental  
Science.

With the January number we will commence the publication in the Items of Interest of a series of articles on the DISEASES OF THE MOUTH, by W. F. Rehfuss, D.D.S., author of "Dental Jurisprudence," and L. Brinkmann, M.D., which will be illustrated by CHROMO-LITHOGRAPHIC PLATES *in natural colorings from actual cases.*

Chromo-  
lithographic  
Illustrations  
of Oral  
Diseases.

The illustrations, about fifty in number, which will accompany the subject-matter throughout the year, will embrace all forms of diseases, both surgical and non-surgical, occurring in the mouth and outside of it, on the face; no expense having been spared to make these illustrations as perfect as the state of modern art will permit.

Surgical and  
Non-surgical.

**The Latest  
Methods of  
Diagnosis.**

The articles will be divided, so that the first seven issues of the *Items of Interest* will contain the description of non-surgical and the last five that of surgical diseases of the mouth. They will present the latest views on the scientific and practical treatment of the subject, the method of diagnosis of all diseases of the mouth, etc., promulgated and accepted by the leading authorities, and also the authors' own contributions, based on a large number of cases. Thus an opportunity will be offered to dentists to familiarize themselves with each individual disease, and easily diagnose these cases when they occur in their practice.

In the preface to the above articles, the authors thus define their position and the nature of their essays :

**Ahead of the  
Text-Books !**

"Realizing that the essays and text-books treating of oral diseases have been prepared and considered entirely from a medical standpoint, and that various lesions of the mouth, important from a dental point of view, have been neglected ; and furthermore, that the descriptive means of diagnosis of oral diseases, as given in the text-books, are not sufficiently treated in practical details to afford the dentist a reliable means of diagnosis ; hence the authors have prepared the present articles with the intention that they be more practical in description and information, and thus better adapted to the purpose of a general practitioner of dentistry.

**Important  
Innovation**

"This is obvious because a certain class of diseases of the mouth, particularly those affecting the oral mucous membrane, have no very marked distinction existing between the different varieties. Some authors hold the view that they are but a stage of the inflammatory condition, differing only in their severity, as, for instance, *stomatitis ulcerosa* is but an advanced stage of catarrhal stomatitis, and the different varieties of the former disease may be mistaken one for the other.

**Colored  
Illustrations  
Indispensable.**

"Where such similarities exist, prosaic descriptions, even if exact and explicit, do not always afford the dentist an accurate means of distinguishing such lesions. Therefore, the authors have illustrated the articles with a series of plates representing typical cases in their natural colorings, thus enabling the readers to familiarize themselves with their appearance. These plates were painted by the authors from actual cases, and, therefore, can be relied upon as being correct."

The authors, as well as the publishers, naturally hope that this new contribution to dental science will be welcomed by the profession, scattered now in almost every nook and corner of the civilized portion of the globe, especially when the low price of a year's subscription to our foremost dental magazine can place it within the reach of every English reading dentist in the world.

Read the  
"Items of  
Interest."

The above is only one of the many features which will distinguish our magazine from our esteemed contemporaries. We will, of course, continue to publish several other original contributions on topics of the day by well-known authorities, and our invariable motto—*conciseness*—will still hold sway. From our excellent contemporaries we will select only the most intrinsically valuable.

Other  
Features.

We also desire to call the attention of the profession to another important original feature of the Items of Interest. It will contain a monthly summary of the progress of dental art and science, consisting of condensed translations and reviews of original contributions by the most celebrated lights of the profession in Europe; from German, French, Russian, Spanish and Italian sources, thus acquainting our English reading subscribers with all the new methods in theory and practice which are of vital interest to every practitioner.

International  
Dental Revue.

But, above all, in appealing to every English reading dentist to become its regular patron, and by this receive a complete account of the contemporaneous progress of the science and art of dentistry, in short, instructive articles, we wish to point out the able editorials which have done their share in spreading the light further, in raising the profession to its proper place, and thus also in raising the dignity of each individual votary of that noblest and most beneficial profession to whose progress mankind owes so much.

A True  
Companion  
Indeed.

Being aware that the majority of our readers are interested in perusing our advertisement pages, which we keep for the use of leading houses and reputable dealers presenting their respective specialties, as well as the different dental colleges, etc., we will further endeavor to make them as attractive as possible, while reserving our independence of criticism. We know that dentists

Our "Ads."

are artistic in their tastes, and we refer to the general make-up of our magazine, and especially to its advertising pages, as illustrating our appreciation of that high characteristic of their class.

**The Lowest-priced and Best Dental Magazine.**

And now, notwithstanding the enormous extra expense incurred in furnishing the chromo-lithographic plates, etc., we desire to announce that the exceptional feature of the Items of Interest being the best, and at the same time the lowest priced dental magazine in the world, will be preserved, so that the subscription price will still be only \$1.00 per year.

**A Timely Advice.**

But it must not be forgotten that it is only by having thousands of regular subscribers, that we can afford to publish it at that low figure. We must, therefore, advise those who receive this sample copy of the Items of Interest to send in their subscriptions as soon as possible, as we do not carry any others than subscribers on our lists.

**To Dentists and Students.**

We hope that every dentist and student will appreciate the value of our efforts on behalf of the profession, and will give us that sign of encouragement which so many thousands of their fraternity have already expressed, by the usual sign of a prompt remittance of the modest price of a yearly subscription.

**A Warning.**

In this connection we must warn our friends against an evil which we, in concert with some other dental publishers, are trying to stop. We have learned that certain newspaper agents take subscriptions for the Items of Interest at as low a figure as eighty cents a year. That is a fraud, and we wish to advise all doctors desiring to subscribe for our magazine to address their communications directly to us, and thus be safe in receiving it regularly.

**Appeal to the Profession at Large.**

We have no doubt that our numerous friends will promptly renew their long-continued subscriptions, and as to the dentists and students who wish to share the benefits of the enlightening companionship of a first-class, progressive dental magazine, we say this:

Doctor, if you are interested in the progress of your profession, if you want to be abreast with the times, insure yourself the receipt of the Items of Interest, which will bring you every month in the year the newest methods of treatment, the most advanced theories, and many of those helpful suggestions and

hints, from *all* sources, which are so essential to the success of every practitioner.

If you take two dental magazines, the *Items of Interest* *must* be one of them; and if only one, the *Items of Interest*, having the largest circulation of any dental magazine in the world, being thus the most popular, and consequently the lowest priced of all, will no doubt be *the* one you care to take.

*You cannot well afford to be without it!*

---

**THE WILMINGTON DENTAL M'F'G CO., PUBLISHERS,**  
1413 Filbert Street, Philadelphia, Pa.

**THE WILMINGTON DENTAL M'F'G CO.,**  
**1413 Filbert Street, - Philadelphia, Pa.**

---

Inclosed find \$1.00, for which please send me the **Items of Interest**, for the year ending with the December number, 1893.

*Name*.....

*Street No*.....

*Post Office*.....

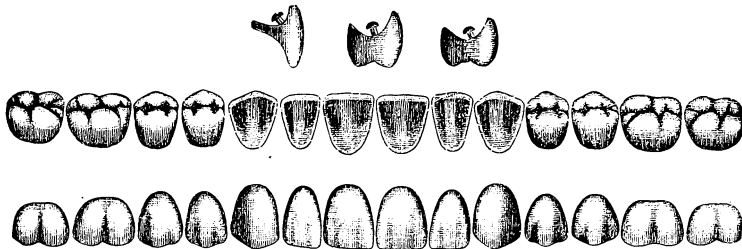
*County*.....

*State*.....



# CRESCENT TEETH.

Patented by Dr. E. A. FLOYD, in the United States, June 19th, 1888;  
Canada, May 7th, 1889, Great Britain, June 4th, 1889.



In describing the advantages of the above teeth we have only to say that the inventor has used them almost exclusively for the last four years. He has found them to surpass any other form of tooth in the following points :

1. They present the natural shape and size of the tooth on the lingual surface, and are, consequently, more pleasant to the tongue.
2. They are made to set over the center of the alveolus. This position gives a more direct and equable pressure in eating than other forms of teeth.
3. In cases where the gum protrudes, making it impossible to insert gum teeth, these teeth can be easily and elegantly adapted to the case by setting them far back or under the ridge.
4. The pins of the teeth being set in the deep groove or bottom of the tooth, vibration or change of position is impossible when the person wearing them is eating.
5. The perfect fit and adaptation of these teeth to the plate, render it almost impossible to accumulate anything under the teeth.
6. In articulating or in adjusting a set of these teeth, the use of the grindstone is almost wholly unnecessary.
7. The bicuspid and molars all being "short bite," they can be used where a "long bite" tooth will not be at all available.
8. Before swaging, see that the pins are perfectly clean and perfectly set in each tooth.
9. As these teeth are open on the sides, a continuous mass or ridge of the plate material is so formed as to produce great and unusual strength at this point of attachment to the plate.
10. Should a tooth get broken from the plate, a new tooth can be replaced in a few minutes, without even marring the polished plate, by simply removing the broken tooth and boring a beveled hole from the inside of the plate down to the tooth ; then insert a tooth of the proper form, size and color, and set the tooth in cement or amalgam.
11. These teeth are so constructed that they can bear a great heat, and can be used most advantageously in any case requiring an artificial tooth.
12. These teeth mounted on any of the rubbers, gold aluminum or platinum, with pink rubber gums, make a strong and beautiful piece of work.
13. Actual test of the Crescent Tooth has proved most satisfactory to the inventor, who has practiced dentistry for thirty-six years, and his patients, and those who have used them ; they are put upon the market with confidence in their integrity and practicability.

## EXTRACT

### From Dr. Floyd's Letter of July 18th, 1892.

---

I HAVE lately put **Crescent Teeth** to another use with success, that is, using them in place of the Logan or other crowns. I will send you a sample tooth, you can see at a glance what it is. I use a **Split, Hollow and Perforated Post** soldered on to the pins of a Crescent Tooth. I will explain how it is put on, and its merits.

1st. It is easily made. I take a piece of thin platinum, cut a strip about the width I want—the length of the post—then perforate it with a small punch, by laying the sheet on a piece of lead or soft metal, then cut off a piece that will roll up to any size post I want.

2nd. I prepare the tooth to receive it, thus: I select a tooth with pins in the center of the tooth, and bind the heads together, or flatten them as I choose, so that they will enter the open end of the post; then I take a little gold foil, or gold cylinders, and wrap around, or pack about, the heads of the pins. Fit the post over the pins, so that it will retain its position while soldering; to make doubly sure, I press the foil well down on the pins, and around the open ends of the post when it is put on, then saturate the pins and foil and lower part of the post with borax ground in water (the consistency of cream), then solder, and you have a crown at a very small cost.

**HOW PUT ON THE ROOT.**—Prepare the root in the ordinary manner. Make the hole as large as the tooth will bear. Get all ready. First fill the hollow post with soft mixed cement (a good article), then either fill the hole in the post and tooth with cement, or put a surplus on the outside, and press the tooth to place, *and you have it.*

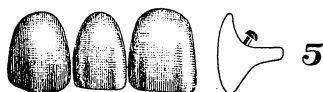
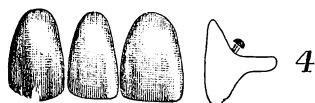
---

### The Advantages of this Kind of a Post Are:

The slit the length of the post gives a chance to make the post smaller or larger; also, to make it tapering, if you desire. The perforated sides give a chance for the cement to press outward through the holes, as the tooth goes to place; and the roughness of the outside of the post, caused by the perforations, make the post immovable, when once in position.

I solder with 18-k. gold solder, or you can use pure gold. I make all my crowns for this kind of work, where I use 18-k. solder, simply by holding the tooth in a gaseous flame. As the Crescent Teeth will stand white heat, I have no trouble about making teeth. I am using these teeth altogether. Then hollow posts can be used for any tooth that you can use for the purpose, but the Crescent Teeth are best in my hands.

# CRESCENT TEETH, IN SETS OF 14's. UPPER.

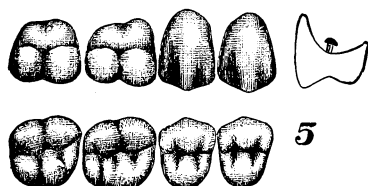
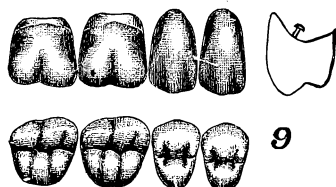
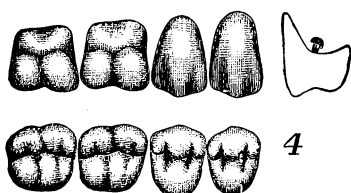
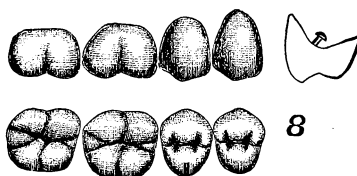
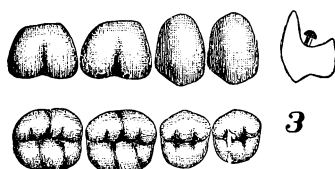
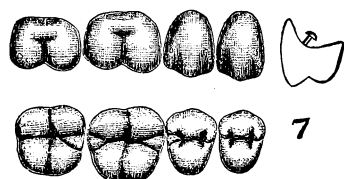
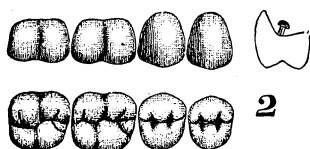
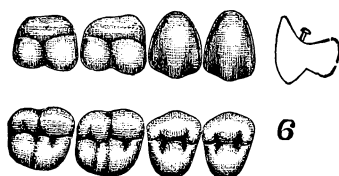


## LOWER.



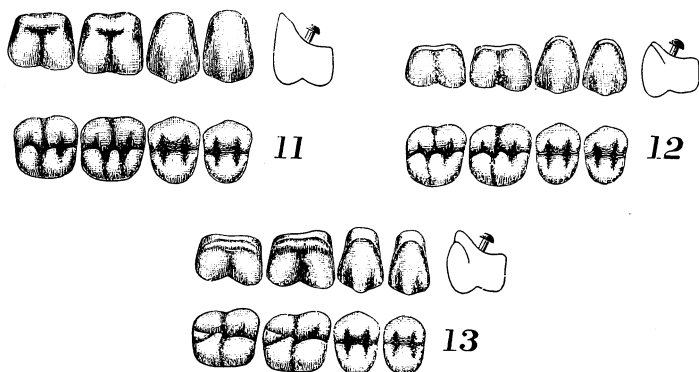
# CRESCENT TEETH, BICUSPIDS AND MOLARS, IN SETS OF 8's.

UPPER.

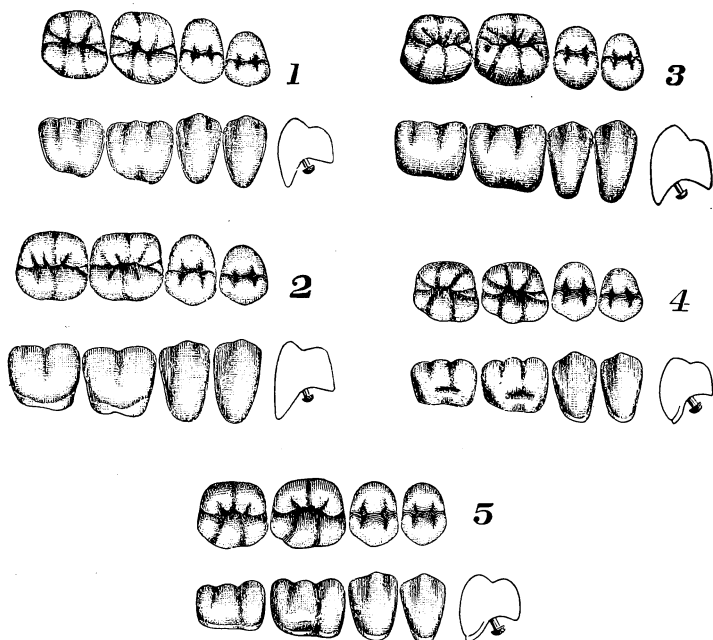


# CRESCENT TEETH, BICUSPIDS AND MOLARS IN SETS OF 8's.

UPPER.



LOWER.



# SPECIAL DIRECTIONS

## TO BE

### Used in Mounting Crescent Teeth.



When packing the Pink Rubber for the facings be careful to avoid letting the heads of the pins become imbedded (in Pink Rubber) as it lacks the strength of the other rubbers, in some cases teeth have loosened and pulled out of the plate where the pins were held by it.

In all cases be sure to pack around the pins the same rubber which is used for the palatine plates. In making a set of Crescent Teeth, don't cut out the rubber between the teeth, but leave it full, so as to look like the natural gums, and give strength in retaining the teeth in the plate.

Dentists are apt to let the six anterior teeth "strike" in articulating a set of artificial teeth, this should be avoided in all cases.

When the Crescent Teeth were first put on the market the pins were rather small; the pins are now treble in size and straight, making one of the strongest on the market. Many new moulds have been added, and the teeth can now be furnished of almost any size, shape or shade.



### PRICES OF CRESCENT TEETH.

Less than \$10.00 lots, per tooth.....	12½ cents.
In \$10.00 lots, per tooth.....	12 "
" 25.00 " " .....	11½ "
" 50.00 " " .....	11 "
" 100.00 " " .....	10 "



THE WILMINGTON DENTAL M'F'G CO.,

Philadelphia,

New York,

Chicago,

Washington,

Wilmington

# CHAMPION PEPPER PADS.

Prevent  
Pain  
Before  
It  
Comes.



End It  
Surely  
When  
It  
Comes.

**THEY ARE THE SAFEST AND MOST EFFECTIVE.**

Mounted on white rubber, these plasters are perfectly waterproof, and being very thin they feel much more pleasant in the mouth, while showing no tendency to crumble.

Dentists can give them to their patients, to be used as a prophylactic in approaching toothache.

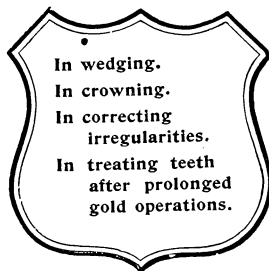
A Pad placed over the root of the tooth

## **WILL REMOVE ALL PAIN AND TENDERNESS**

in cases where persistent, gentle and sufficient stimulation is required to effect resolution.

Suppuration can be induced by retaining this Pad in position until a fistulous opening is obtained.

Remember, **THE CHAMPION PEPPER PAD** is invaluable:



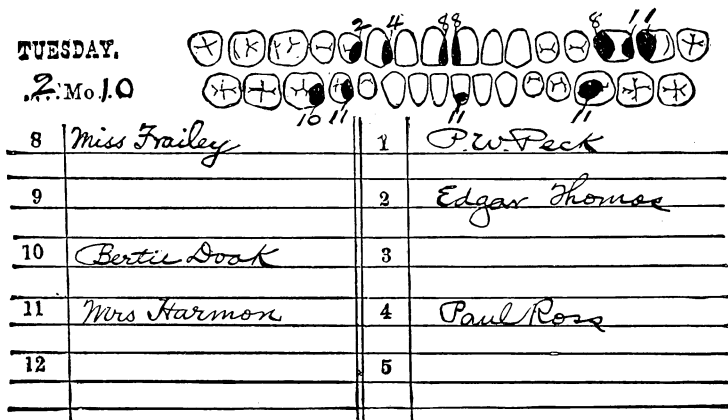
We put them up in handsome tin boxes, as illustrated above, each containing nine dozen, with a sufficient number of envelopes to place the Pads in, which you desire to give your patients.

*Full directions are printed on each envelope.*

### **PRICES:**

Per box, containing nine dozen .....\$1.00  
Per dozen boxes..... 7.00

# THE DIAGRAM Appointment Book.



The above is a fac-simile of one day's work in the "Diagram" Appointment Book; the appointments are made as usual, and the fillings are accurately noted on the diagram. No ledger or other memorandum is necessary for immediate use; at leisure the work may be copied into the large ledger, if desired. After each person's name a note may be made of the amount charged or paid. It will be seen that it is easy to keep a record on this diagram of the work of this day, or of any day, by letting the hour of appointment stand for that person in the diagram; thus the figure 8 in the diagram stands for Miss Frailey, the 8 o'clock appointment.

**The "Diagram" Appointment Book** and Pocket Diary is a book suggested by practical dentists, and meets the wants of the profession. The "Diagram" Appointment Book is  $6\frac{3}{4} \times 4\frac{1}{4}$  inches. In the front it has calendars for three years, and a table to show the number of days from any day in one month to the same day in any other month. The new feature of the book combines with an appointment book a DIAGRAM for registering the work to be done, or to make memorandum of the work when finished, by having a diagram for each day, and the diagram in such shape as to be efficient and yet not make the book bulky and unhandy. There are one week's appointments on two opposite pages, and, therefore, six diagrams on same space. In the back of the book are pages for memoranda.

The book may be used without the diagrams and then is very similar to other appointment books. There can be no disappointment in the paper, ruling, printing or binding, as they are all first-class, in every particular.

## PRICES.

Bound in Cloth.....	50 cents.
" " Leather.....	75 "

*The Returns are All In, and*  
*Dentists as well as Students*

—WILL HAVE TO TAKE THOSE—

# FIVE HUNDRED AND SIXTY-SEVEN USEFUL HINTS.

By WM. H. STEELE, D.D.S.

The book having received the unanimous approval of the dental press, it remains for us now to do the pleasant part of our duty in presenting here the gist of the fine editorial reviews :

\*\*\*\*\*  
 \*\*\*\*\*  
 \*\*\*\*\*  
 \*\*\*\*\*  
**Dental Cosmos :**  
 "The book is well printed, and should find a ready acceptance by the dental profession."  
**Dominion Dental Journal :**  
 "It is an *omnium gatherum* of practical use after the manner of Dr. Catching's Compendium."  
**International Dental Journal :**  
 "For the service this book is intended to perform it is well prepared, and will, no doubt, be of great value."  
**Dental Practitioner :**  
 "The Wilmington Dental M'f'g Co. is fast assuming an important place among the publishers of dental books."  
**Dr. T. B. Welch, ITEMS OF INTEREST :**  
 "A thousand pertinent suggestions brought within the compass of a book of three hundred pages."  
**Dental Review :**  
 "The first four articles alone are worth the price of the book."  
 \*\*\*\*\*  
 \*\*\*\*\*  
 \*\*\*\*\*  
 \*\*\*\*\*

We will not burden you with *all* the extracts, but we hope that you will now take those "HINTS" for yourselves and get all the benefit you can for your successful practice.

As a book of ready reference on almost any subject pertaining to everyday practice it is unique. It covers the whole field of dentistry, and gives you points of information and advice based on thoughtful observation and a varied practice, every one of which will often be found worth more than the price of the book.

Sooner or later you will need it. Hundreds of practitioners have ordered it sooner rather than later.

Price, Bound in Cloth (post-paid).....\$2.50

THE WILMINGTON DENTAL M'F'G CO.,  
 PUBLISHERS,

1413 Filbert Street, Philadelphia, Pa.

# CHANGES IN PRICES.

SINCE ISSUING OUR CATALOGUE JANUARY 25th, 1891.

Corrected to November 15th, 1892.

		Each.	\$10 lot.	\$25 lot.	\$50 lot.	\$100 lot.
Page 26.	Crescent .....	\$0 12½	\$0 12	\$0 11½	\$0 11	\$0 10
	Genese Crown .....	35	33	32	30	28
	“ Pinless, Gum .....	10	09½	09	08½	08
	“ “ Plain .....	10	09½	09	08½	08
	Land's Facings.....	08				
	Platinum Pins, Land's, small.....	each				PRICE. \$0 05
	“ “ “ large.....	“				08
	“ Posts for Genese Crown.....	“				25
“ 70.	Foil Scissors, No. 7.....	per pair				I 25
	“ “ “ 8, Japanned Handles.....	“				70
	“ “ “ 8, Nickel-plated Handles.....	“				75
“ 75.	Aluminum Plate.....	per oz.				30
“ 75.	Gold Plate, 24-k.....	per dwt.				I 20
“ 75.	“ “ 22-k.....	“				I 15
“ 75.	“ “ 20-k.....	“				I 05
“ 75.	“ “ 18-k.....	“				95
“ 75.	“ Solder, 20-k.....	“				I 05
“ 75.	“ “ 18-k.....	“				95
“ 75.	“ “ 16-k.....	“				90
“ 75.	“ “ 14-k.....	“				80
“ 75.	“ Wire, 20-k.....	“				I 15
“ 75.	“ “ 18-k.....	“				I 05
“ 75.	Crown Metal.....	“				I 20
“ 75.	Platinum Plate and Wire.....	} Prices fluctuate.				
“ 75.	Iridio—Platinum Plate and Wire.....					
“ 75.	Silver Plate.....	per dwt.				10
“ 75.	“ Solder.....	“				10
“ 82.	Fowler's Stopping (out of the Market).					
	We recommend Gilbert's Temporary Stopping					
	instead.....	per pkge.				50
“ 96.	Cogswell Rubber-Dam Holder.....					75
“ 96.	“ “ “ without check guards.....					50
“ 190.	Muriate Cocaine, Anhydrous Crystals, 5 gr. vials..	each				22
“ 190.	“ “ “ “ 10 “ “ ..	“				35
“ 190.	“ “ “ “ 15 “ “ ..	“				50
“ 190.	“ “ “ “ ⅛ oz. “ “ ..	“				I 50
“ 190.	“ “ “ “ 1 “ “ “ ..	“				II 00
“ 190.	“ “ “ Solution, 2 per cent., ⅓ “ “ “ ..	“				16

## CHANGES IN PRICES—(Continued.)

Page 190.	Muriate Cocaine Solution, 2 per cent., 1/8 oz. vials, per oz.	65
" 190.	" " " 2 " I " " "	45
" 190.	" " " 4 " 1/8 " " each	12
" 190.	" " " 4 " 1/8 " " per oz.	80
" 190.	" " " 4 " I " " "	60
" 191.	Phenol Sodique, 8 oz. bottle.....	35
" 192.	Floss Silk, Waxed, 24 yds.....per doz.	2 00
" 192.	" " 24 " .....1/2 gross	9 50
" 191.	Genese Separating Strips (assorted, 50 to box)....	50
" 206.	Rubber Wedges, large size (50 to box).....	80
" 255.	No. 6 Gas Outfit, complete.....	30 00
" 255.	" 7 " " " .....	47 00
" 256.	New Yoke Attachment .....	5 00
" 256.	" " " with Vitalized Air Cup....	8 00
" 256.	Vitalized Air Cup, with New Yoke Attachment....	8 00
" 293.	Riveting Hammers, Improved Pattern, all Steel... each	60
" 307.	Oil Can.....	25
" 322.	Felt Wheels, Nos. 1, 1a, 1b..... each	25
" 322.	" " " 2, 2a, 2b, 3, 3a, 3b..... "	15
" 323.	" Cones, No. 1 ....	20
" 323.	" " " 2 .....	10
" 326.	Mathew's Contouring Pliers .....	3 00
	Heavy Brass Blow Pipes. Not made any more.	
" 327.	Plate Shears, Rivet Fastening..... each	1 00
" 331.	Asbestos Fiber..... per lb.	30
" 333.	Soldering Tweezers, 3 1/2 to 4 1/2 inches.....per pair	10
" 336.	Foot Blower, No. 10 B.....	8 00
" 340.	Mechanical Saw Frames, No. 1.....	75
" 340.	" " " " 2.....	60
" 343.	Funnels, 8, 9, 10, 11 and 12 inches..... per lb.	50
" 354.	Buxton's Anesthetics, second edition, cloth. ....	1 50
	Evans' Crown- and Bridge-work, second edition, now in press.	
	Gorgas' Questions and Answers, Part I, cloth...	2 00
	" " " " " II, " ...	2 50
	" " " " " III, " ...	2 50
	Harris' Dental Directory, new edition, cloth.....	5 00
	" " " " " sheep.....	6 00

---

## THE WILMINGTON DENTAL M'F'G CO.

# The Ryneear Gold Crown.

THESE crowns are struck up solid from 22-karat gold plate, making a simple, beautiful, and well-adapted crown. A set comprises 42 crowns, 18 bicuspidis and 24 molars, and are exact counterparts of carefully selected, typical teeth of each class. They are of good weight, fine form, and well finished.

The comparatively small number of crowns forming a set renders it possible for dentists to keep a complete set in their offices, thus being able to take full advantage of any case that presents itself. To meet this demand, we furnish a full set mounted on pins, and each crown properly numbered and placed in a handsome cloth-covered case, with plate glass top.

The diagram on the opposite page gives exact sizes of crowns at the neck. It will be noticed that there is only a slight difference between sizes, really only one-thousandth of an inch in diameter. To decide on the size desired, twist a piece of binding wire around the neck of the tooth and tighten by twisting the ends, and compare it with the diagram and select nearest size. Order by number only.

In using these crowns we recommend the pliers for crown- and bridge-work designed by Dr. Ryneear and Dr. Reynolds; with them the crowns can be very easily changed in contour, knuckled, or drawn in at the free edge.

## PRICES.

Set complete, 42 crowns, in a neat case .....	\$105 00
Bicuspidis, 22-karat gold .....	each 2 50
Molars, " " .....	" 3 00

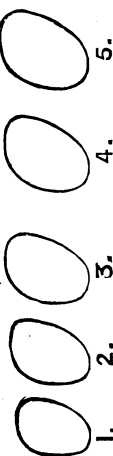
We will make to order crowns of 24-karat gold at a cost of 50 cents extra per crown.

Patented Sept. 16<sup>th</sup>: 1884.

# DIAGRAM OF SIZES. MOLARS.



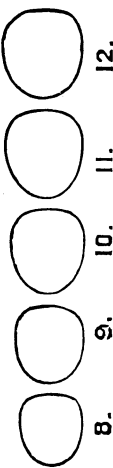
RIGHT UPPER.



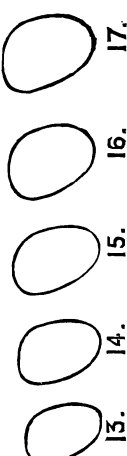
RIGHT UPPER WISDOM.



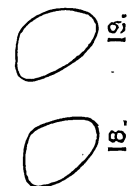
RIGHT LOWER.



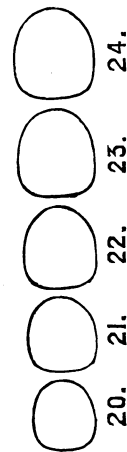
LEFT UPPER.



LEFT UPPER WISDOM.

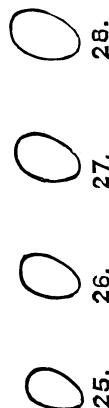


LEFT LOWER.



# BICUSPIDS.

RIGHT UPPER.



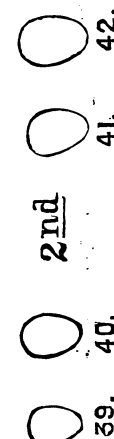
LEFT UPPER.



RIGHT LOWER.



LEFT LOWER.



COPYRIGHTED 1891, BY M. RYNEAR, N.Y.

# *Wants, For Sale, &c.*

**TO ADVERTISERS.**—Our terms for advertising under above headings are **ten cents per word**, including the captions, "Wanted," or "For Sale," and address. Initials will be charged same as words. Advertisements must be in our hands by the 20th of the month, to insure insertion in following month's issue. Cash must accompany all advertisements. **THE WILMINGTON DENTAL M'FG CO.,**

**BRANCHES:** { 1300 Broadway, New York.  
78 State Street, Chicago, Ill.  
1217 F St., N. W., Washington, D. C. } 1413 Filbert St., Philadelphia, Pa.

**260—For Sale.**—Fine practice and outfit, at cost of outfit. R. E. Pretlow, Helena, Ark.

**261—Wanted.**—Good dentist as assistant. Address, "H.," Lock Box 40, Rhinelander, Wis.

**262—For Sale.**—Practice established nineteen years. Receipts \$4,500 per year. Address, "Dentist," care of The Wilmington Dental M'fg Co., Chicago, Ill.

**263—Wanted.**—Rapid operator. Salary, \$120 a month. Dobson, West Point, Va.

**264—For Sale.**—A complete dental outfit at half price. For particulars, address Dr. Ingalls, 1422 Ninth street, N. W., Washington, D. C.

**265—Wanted.**—Position by a graduate. Address, "C.," care of The Wilmington Dental M'fg Co., Philadelphia.

**266—For Sale.**—Old established office in New York. Good location for advertising business. Very little cash required. "Franklin," P. O. Box 2,002, New York

**267—Wanted.**—To buy practice or partnership. 539 Main street, Buffalo, N. Y.

**268—For Sale.**—A first-class dental practice and office. Best location in Washington, D. C. Address, "W. T.," care of The Wilmington Dental M'fg Co., Washington, D. C.

**269—Wanted.**—Second-hand teeth and dental goods wanted. 11 East North street, Buffalo, N. Y.

**270—For Sale.**—A dental office in the finest city in the nation. Correspondence solicited. Address, Dr. Bristoe, No. 130½ South Spring street, Los Angeles, Cal.

**271—Wanted.**—First-class rubber plate worker and one all-round man. Address, "Westo," care of The Wilmington Dental M'fg Co., Philadelphia.

**272—For Sale.**—Half interest in a dental practice of \$10,000. Only one assistant, in city of 150,000 population. Must be a good man, and have \$4,000 in cash. Address, "Minnesota," care of The Wilmington Dental M'fg Co., Philadelphia.

**273—Wanted.**—A position as assistant, by a graduate of the University of Pennsylvania. Address, "Forum," care of The Wilmington Dental M'fg Co., Philadelphia.

**274—For Sale.**—A centrally located office in San Francisco. Price, \$1,000. Income, \$5,000 per year. Address, "D. I. G." care of Joseph W. Edwards, San Francisco, Cal.

**275—Wanted.**—First-class operator and extractor. Graduate. Salary, \$20.00 a week. Address, "D. M. C.," care of The Wilmington Dental M'fg Co., Philadelphia.

**276—For Sale.**—Established practice; new furnishings; good point for dental association. Popular prices; will reach \$5,000 a year. Address, "La Grippe Invalid," care of The Wilmington Dental M'fg Co., Washington, D. C.

**277—Wanted.**—Position by A No. 1 operator. Good habits. Eleven years' experience. Graduate. Address, "Johnson," 459 Cherry street, New York City.

WANTS, FOR SALE, ETC.—CONTINUED.

278—**For Sale.**—\$500.00. Office and practice established twenty years. Transient business \$200.00 per month. Owner leaving the city. Address, Dr. Lawrence, 78 Monroe street, Chicago, Ill.

279—**Wanted.**—A graduate well up in conservative practice, and a first-class plate worker, wants situation for the winter. Address, "A. P.," care of The Wilmington Dental M'f'g Co., Philadelphia.

280—**For Sale.**—Residence and \$3,000 practice, established eight years. Booming 3,500 Kansas town. Fine office; cheap rent. Residence cost \$1,800. Will sell for \$2,000. A big bargain. Address, "Kansas," care of The Wilmington Dental M'f'g Co., Philadelphia.

281—**Wanted.**—All-round dentist to take permanent charge of Hartford office. Single or with wife only. References must be perfect. State salary expected. Dr. Dills, 405 Main street, Hartford, Conn.

282—**For Sale.**—Half or all of dental office in Detroit, Mich. Established twelve years. Central location; golden opportunity. Address, "Health," care of The Wilmington Dental M'f'g Co., Philadelphia.

283—**Wanted.**—Good all-round man. Graduate preferred. Must be particularly good rubber plate maker and extractor, of strictly temperate habits and honest. Address, "Permanent," care of The Wilmington Dental M'f'g Co., Philadelphia.

284—**For Sale.**—\$4,500 practice in a live Western town of 10,000 population. Only two other dentists; neither graduate. Price, \$1,500. \$500 in cash, balance on terms to suit purchaser. Address, "C. A. C.," care of The Wilmington Dental M'f'g Co., Philadelphia.

285—**For Sale.**—Residence, property and office buildings, erected two years ago. Property cost \$6,000. Located in Southern Kansas, county seat. 3,000 inhabitants. Business of ten years' standing. Splendid opportunity to step into a first-class dental practice and elegant home at a bargain. Address, "Southern," care of The Wilmington Dental M'f'g Co., Chicago, Ill.

286—**For Sale.**—A fine opening for a skillful young operator, with capital. Thirty years' practice, high prices, and best class of patients. City of 250,000 inhabitants. Address, "W.," care of The Wilmington Dental M'f'g Co., Philada.

287—**For Sale.**—Dr. C. S. Case, who has been for the past twenty years in the general practice of dentistry in Jackson, Mich., and has recently opened a branch office at 1119 Masonic Temple, Chicago, for the practice of orthodontia and cleft palate work, with a view of spending half his time in each place, now finds that his Chicago work requires all his time, and is therefore willing to dispose of his Jackson office and practice on very easy terms. Address all communications to Dr. C. S. Case, 1119 Masonic Temple, Chicago, Ill.

288—**Wanted.**—Experienced all round man. Address, "Experience," care of The Wilmington Dental M'f'g Co., Philadelphia.

289—**For Sale.**—One of the most lucrative practices of South America. Climate perfect. Address, for full particulars, "E. W. R.," care of The Wilmington Dental M'f'g Co., Philadelphia.

**Wanted.**—10,000 dentists, graduates and students looking for assistants, positions, or having a practice or anything else for sale, or desiring to make any offer to the dental world, to know that this page gives them unexceptional facilities for making known their wants. It is eagerly sought every month by thousands of dentists and others, because they have convinced themselves that their chances of reaching the desired parties are more enhanced through the medium of this journal than through half a dozen others. Besides, the average-sized advertisement costs you less than twenty-five cents for every thousand doctors it reaches. Can you possibly make known your wants cheaper, and have them answered satisfactorily, too?

# BARGAINS!

## AT CHICAGO DEPOT.

No. 1	C. Cycloid Chair, Upholstered in Leather. Only shop-worn.	\$80 00
No. 2	C. S. S. White Crank Chair, Upholstered in Brussels.....	50 00
No. 3	C. Davenport Chair, Iron Base, Red Plush, nearly new.....	25 00
No. 4	C. Wooden Archer Chair, Green Plush.....	35 00
No. 5	C. Wooden Archer Chair, Crimson Plush.....	35 00
No. 6	C. Wooden Archer Chair, Brown Plush.....	25 00
No. 7	C. S. S. White Dental Engine, Hodge Hand-piece, Flexible Attachment, Improved Top, 10½ in. Wheel, has broken leg, but does not injure stand materially.....	20 00
No. 8	C. Hood & Reynolds' Standard Engine, Brown Hand-piece, nearly new.....	30 00
No. 9	C. American Engine, Flexible Attachment, No. 7 Hand-piece, 10½ inch Wheel, nearly new.....	35 00
No. 10	C. Johnson Engine, No. 6 Hand-piece, Wooden Standard...	15 00
No. 11	C. American Engine, 13 inch Wheel, No. 7 Hand-piece, nearly new.....	35 00
No. 12	C. Hood & Reynolds' Rocking Engine, Brown Hand-piece, nearly new.....	30 00
No. 13	C. Old-style Cuspidor Stand, White Marble Top.....	5 00
No. 14	C. 1 Bonwill Electric Mallet and Four Cell Partz Battery, nearly new.....	50 00

## AT WASHINGTON DEPOT.

No. 1	W. Wooden Archer Chair.....	\$15 00
No. 2	W. S. S. W. Model Cabinet Case. As good as new. Price, new, \$70.00. Will sell for.....	50 00
No. 3	W. Tripod for 500-gallon Cylinder.....	3 50
No. 4	W. United States Lathe. As good as new.....	12 00
No. 5	W. Old Style Lathe.....	7 00
No. 6	W. Bonwill Electro-Magnetic Mallet, in good condition....	18 00
No. 7	W. S. S. W. Dental Engine, with Hodge Old Style Hand-piece and Flexible Attachment. In good condition..	25 00

## BARGAINS!

### AT PHILADELPHIA DEPOT.

No 1.	Driving Wheel, with Swing Treadle ; Wheel weighs about 30 lbs. In good order.....	\$6 00
No. 2.	No 6 Gas Outfit, complete, with 100 gallons gas. Price....	23 00
No. 3.	Johnston Engine, Universal. Hand-piece. Price*.....	15 00
No. 4.	Register Engine. Hodge Hand-piece. Good order. Price†	25 00
No. 5.	Davis & Co.'s Gasometer, with Automatic Inhaler, Tubing, 100-gallon Cylinder and Gas. Good order. Price.....	38 00
No. 6.	Fletcher Gasometer, complete with Bracket Ornament, Long's Inhaler, Tubing, 100-gallon Cylinder and Gas. Only shop-worn. Cost, new, \$44. Price.....	35 00
No. 7.	Register Engine and Mallet. Nearly New. Price*.....	35 00
No. 9.	Bonwill Electric Mallet. In good working order. Price..	23 00
No. 10.	S. S. White Engine. Small Wheel. New Universal Hand-piece. In good order. Price*.....	20 00
No. 11.	One Eisenhart Electrical Apparatus for extracting teeth. In good order and ready for work. Costing, new, \$40 00. Price.....	25 00
No. 12.	Driving Wheel, Open Centre, with Treadle. Only shop-worn	5 00
No. 13.	Talbot Steam Celluloid Apparatus. Equal to new. Original price, \$11.00 .....	6 00
No. 14.	Glycerine Celluloid Apparatus. Good order.....	3 00
No. 15.	Bonwill Engine with No. 8 Hand-piece, Slip-joint attachment. In very good order. Price*.....	30 00
No. 16.	Adjustable Fountain Spittoon, Newly Nickel-plated and Japanned, and Ornamented, and with New Tubing. A real bargain.....	50 00
No. 17.	American Lathe-head and Stand. In good order .....	8 00
No. 18.	Seabury Vulcanizer, with two Flasks for Gas.....	12 00
No. 19.	No. 1 Bunsen Battery ; 4 Cells. In good order, with Walnut Case.....	6 00
No. 20.	1 Carroll Aluminum Furnace ; never been used. Price, new, \$20.00 ; 10 qts. Investing Material. ....	17 00
No. 24.	Bonwill Engine. Bonwill Hand-piece. Price*.....	20 00

\*Boxing 75 cents extra.

†Boxing, \$1.00 extra.

### AT NEW YORK DEPOT.

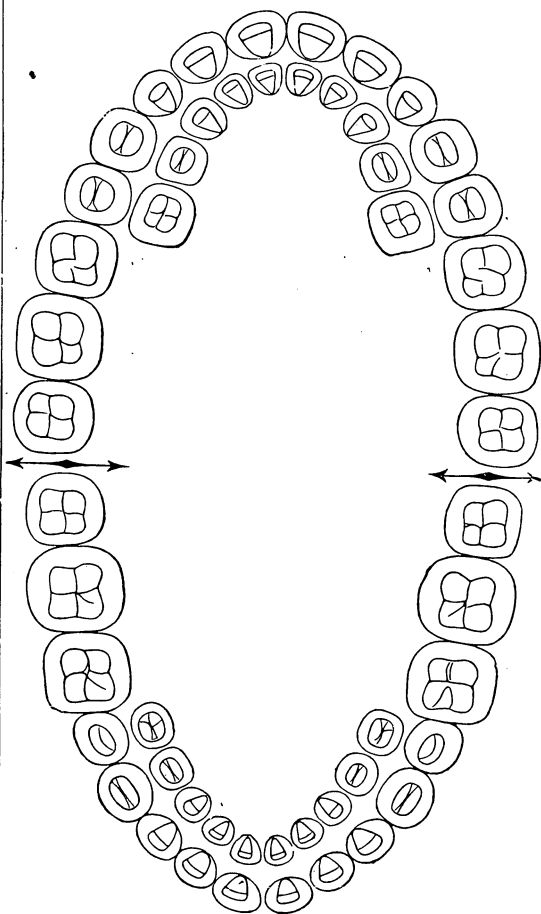
No. 2 N.	S. S. White Engine. No. 8 Hand-piece. In good condition. Price† .....	22 50
No. 3 N.	S. S. W. Engine with Hodge Hand-piece. Price†.....	25 00
No. 4 N.	S. S. White Pedal Lever Chair. Green Plush.....	90 00
No. 5 N.	S. S. W. Engine with Universal Hand-piece. Excellent condition .....	30 00
No. 6 N.	Hood & Reynolds' Standard Chair ; Maroon Plush ; good as new .....	110 00
No. 7 N.	Hood & Reynolds' Lathe, with Lawrence Head, in excellent order. Price.....	12 00
No. 8 N.	Dr. Tee's Lilliput Furnace, without marks of fire. Price.	17 50
No. 9 N.	Johnston Engine, O. S., 6 Hand piece.....	10 00
No. 10 N.	Harris Chair, Green Plush, good condition.....	50 00
No. 11 N.	Johnston Engine, Universal Hand-piece .....	15 00
No. 12 N.	Two Two-case Whitney Vulcanizer, second-hand, with New Flasks, Jackets, Stand and Burner. Complete. New, \$14.00 .....	10 00
No. 14 N.	Our No. 1 Cabinet in Antique Oak or Walnut. Price....	35 00
No. 15 N.	H. and R. Standard Engine, with Brown Hand-piece. Shop-worn.....	35 00
No. 16 N.	Archer No. 2 Chair. Good for extracting .....	15 00
No. 17 N.	Morrison Chair. Good condition.....	75 00

\*Boxing, \$1.00 extra.

†Boxing, 75 cents extra.

THE BOOK OF THE DAY!      YOU NEED IT EVERY DAY!

# ALLPORT'S \* DENTAL \* LEDGER.



DR. ALLPORT has designed this Ledger specially for the needs of the dental profession, and to this day it holds its own as being the simplest, yet most intelligible of any Ledger. A chart accompanies each account, and with proper marking will show the state of each mouth and the work that has been done. Each account is ruled for name and address, date, description of the different operations, charge for same, and credit for amounts paid. Each book is suitably indexed.

The paper is of the best quality, and the ruling, printing and binding are first-class.

## PRICES.

One account to a page, 300 pages, half Roan....	\$2.00
Two accounts      "      172      "      .....	2.00
"      "      "      340      "      .....	3.00
"      "      "      340      "      half Turkey.	3.50

We suggest the use of our Examination Tablets and No. 4 Bill Heads with this Ledger, making a complete outfit.

# WANTED

## WE WANT FULL NUMBERS OF ITEMS \* OF \* INTEREST

for 1879 and 1880; also, copies for the first eleven months of 1881; and for March and August, 1882.

We are willing to pay a reasonable price for above copies, if sent us in good condition.

THE WILMINGTON DENTAL M'F'G CO.,  
1413 Filbert Street, Philadelphia, Pa.

---

## Painless Filling Without Endangering the Pulp.

THE ONLY MODERN AND SCIENTIFIC METHOD NOW RECOGNIZED BY  
PROFESSIONAL DENTISTS IN GENERAL.

*Write for information.*

THE OPTEMUS DENTAL CO.,  
No. 272 N. Mississippi Street,  
INDIANAPOLIS, IND.

---

## DR. SLADE'S LOCAL ANESTHETIC, FOR PAINLESS EXTRACTION OF TEETH,

is the best we ever used, not only in reducing the pain of extracting, but in there being no bad after-effect from the use of the anesthetic. Directions for using the hypodermic syringe, as he uses it, are worth ten dollars to any dentist using a local anesthetic.—  
*Dr. C. E. Welch, Vineland, N. J.*

4-ozs. Local Anesthetic, Full Directions, - - - - - } \$4.00  
1 Hypodermic Needle used by Dr. Slade, - - - - - }

Order of DR. S. C. SLADE, Millville, Cumberland Co., N. J.

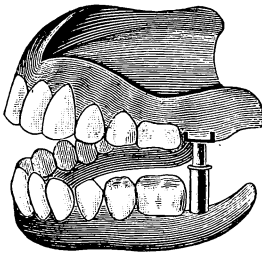
## BASE METALS.

Babbitt-Metal (Haskell's formula).....	in ½ lb. ingots, per lb., \$ .50
Counter-Die Metal, " " " " " "	" " " " " "
Chamber Metal.....	" " " " " "
Lead.....	" " " " " "
Pattern Metal.....	" " " " " "
Tin.....	" " " " " "
Watt's Metal.....	6 ingots to a lb., per ingot, 1.00
Zinc.....	in ½ lb. ingots, per lb., .14

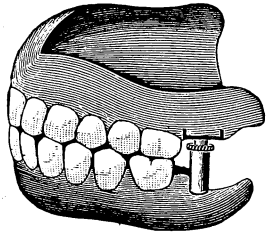
THE WILMINGTON DENTAL MFG CO.

## DR. STEDMAN'S SPRINGS,

PATENTED MAY 19, '91, AND MAY 3, '92,



For holding upper and lower teeth firmly in place are a success. Any full denture will be improved by their use. Free movement allowed the jaws in all directions. Price, \$5.25 per set. For further information, address



J. J. STEDMAN, LA PORTE, IND.

## GOULD DENTAL CHAIR.



Fig. II—Normal.

We would merely call your attention to a few of its Advantages over all other Dental Chairs:—

- 1st. The Gould is the only first class low priced chair.
- 2nd. The Gould is the only low priced pedal lever chair.
- 3rd. The Gould has more and better movements than any high priced chair made.
- 4th. The Gould is the only chair that has the Horizontal Anæsthetic Position.
- 5th. The Gould is the only chair that has the Chloroform Narcosis Position.
- 6th. The Gould is the only complete chair, requiring "no extras."
- 7th. The Gould obtains all the positions secured by other chairs and more.
- 8th. The Gould chair has the most satisfactory head rest made.
- 9th. The Gould is the only chair made that gives you the side tilt without "extra cost."
- 10th. The Gould is the simplest and therefore the easiest to keep in order.
- 11th. The Gould is the only chair with which an Elegant Nickel Spittoon is furnished Free.
- 12th. The Gould is the only chair that can be tilted forward for taking impressions.
- 13th. The Gould is more convenient to the operator than any other.
- 14th. The Gould gives satisfaction when others fail.
- 15th. The Gould is the best and cheapest chair in the world.
- 16th. The Gould is sold on its merits and is warranted to be as represented.



Fig. XIV—Chloroform Narcosis.

## CANTON SURGICAL AND DENTAL CHAIR CO.,

Nos. 62, 64 and 66 East Seventh St., CANTON, OHIO.

Sole Manufacturers of "Yale" Surgical Chairs, Gould Dental Chairs, Fletcher Fountain Spittoons, Duplex Cord Dental Engines, The New Spiral Dental Engines, Etc.

## THE ELECTRO-DEPOSIT PLATE.

The electro-deposit dental plate, made of pure gold and silver, is the most perfect-fitting dental plate made. It is as strong as gold. It is better than rubber. It is clean. The plates are prepared already for the dentist to put the teeth on with rubber attachment. Make the model from a plaster impression, and mark it just as you want the plate. From consultation with, and experiments made by, Mr. Thomas Edison, the tendency to discolor has largely been overcome, and if the patients are instructed to keep them well cleansed, there is no difficulty in this respect. It is well, however, when the final finish is put on, to have at least two extra pennyweights of gold added.

Ten dollars should in all cases accompany the order.

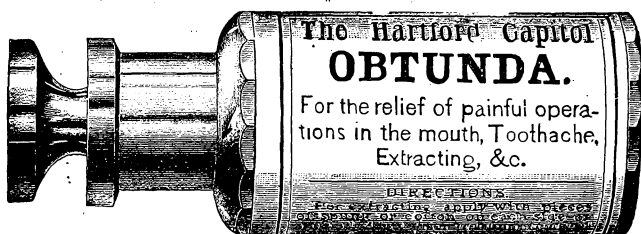
Address DR. F. O. STOCKTON, 17 West Park, Newark, N. J.

**IT'S THE BEST.**

**IT'S THE OLDEST.**

Painful operations can be relieved by it, and it pays to ease the pain.

**\$1.00 A BOTTLE.**



Order from  
your Dealer  
or

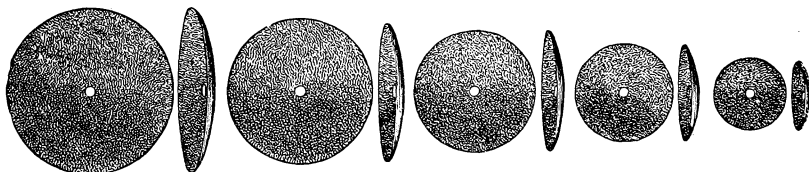
**Hartford  
Dental Depot,  
Hartford, Conn.**

**W. C. Messinger,  
Proprietor.**

**TEST:**—Apply to gum; force a pin through to tooth—you will not feel it.  
Cotton is the best conductor.

Patronage from every State in the Union.

## TEAGUE'S DEPRESSED DISKS.



$\frac{1}{8}$  inch.

$\frac{3}{8}$  inch.

$\frac{1}{2}$  inch.

$\frac{3}{4}$  inch.

$\frac{7}{8}$  inch.

These Disks are made to fit the convex surface of a tooth and thereby preserve the contour in dressing a filling. Cut from Sand Paper, Emery Paper, Cuttlefish Paper, Emery Cloth and Crocus Cloth. Coarse and fine grits of each, except Crocus Cloth; this is of a very fine grit for a lustrous polish. In addition to the above material, Disks of fine and coarse Garnet Paper are put in the boxes of Assorted Disks. A chart for accuracy in ordering Depressed Disks furnished on application.

Depressed Paper Disks,		in boxes of 100, 15 cts.	
"	Cloth	"	" 100, 35 "
"	Assorted	sizes $\frac{5}{8}$ in., $\frac{3}{4}$ in.,	" 200, 30 "
"	"	" $\frac{1}{2}$ in., $\frac{3}{8}$ in., $\frac{3}{4}$ in.,	" 400, 60 "
"	"	" $\frac{5}{8}$ in., $\frac{1}{2}$ in., $\frac{3}{8}$ in., $\frac{3}{4}$ in.,	" 500, 75 "

### OTHER SPECIALTIES:

Teague's Impression Compound,	4-lb. can, 50 cts.
" Sand Paper Strip Chuck,	25 "
" Cavity Cap Disks,	- per 100, 25 "
" Capsicum Plasters,	100, 50 "
" Arm-rest,	\$1.00

**SOLD BY THE TRADE,**

or by

**Dr. B. H. TEAGUE,**

**Aiken, S. C.**

XXI

## DR. DARBY'S SPECIALTIES.

**DENTAL CAPSICUM PLASTERS**, well-known and used throughout the world. \$1.00 per box.

**HARD BUFF POLISHERS**, for the engine. Great for polishing fillings and discolored enamel. 40 cents per 100.

**PAPER POINTS**, for drying pulp canals. Speak for themselves. Very practical. 25 cents per 100.

**HARD BUFFS FOR THE LABORATORY**, three large sizes, very stiff. Best polisher ever used on crown and bridge work. Per doz., 25 cents.

For sale at all depots.

Manufactured by **FRANK B. DARBY, D.D.S., Elmira, N. Y.**

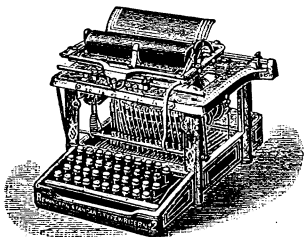
### DR. THROCKMORTON'S

#### Removable Bridge Teeth and Teeth Without Plates.

Made on Gold, Aluminum, and all the white metals, and very nice work can be made on rubber and gold. The teeth are firmly clasped in the mouth, and the patient can remove them, and clean and replace them. Any dentist that can make a rubber plate can do this work. In this patent I have simplified dentistry and brought it to perfection, just where it belongs. Dentists having difficult partial cases can send them articulated, and I will attach the patent, and finish ready to fit in the mouth. Write for circular, name the county. I only sell to one man, deeding my right to him, and give him time to pay, on monthly installments of \$5 or \$10 per month. I give steel stamp and electrotypes free. Sent on approval, by express, allowing examination.

**J. A. THROCKMORTON, D.D.S., Sidney, Ohio.**

If those who have writing to do knew of the  
benefits derived from using a



**Remington  
Standard  
Typewriter**

our business would be increased ten-fold.

**WYCKOFF, SEAMANS & BENEDICT,**  
834 Chestnut Street, Philadelphia.

(CONTINENTAL HOTEL.)

Send for Illustrated Catalogue.

Machines Rented.

## LET US REASON TOGETHER!!

The nineteenth century has been called one of statistics. "Figures do not lie," is the modern number-monger's motto. Well, *we* are not afraid of figures, on the contrary we proudly refer our readers to such good authority as the "American Newspaper Directory" for 1892, according to which the circulation of the

### ITEMS OF INTEREST

more than equals that of ten other dental journals combined.

### FACTS WORTH REMEMBERING.

You will find that at the rate of circulation of other dental journals, the price per page for reaching every one thousand intelligent dentists through the medium of the **ITEMS OF INTEREST** will be possibly less than one-fourth.

Dentists and students desiring assistants or positions, or having any "wants," or anything "for sale," will find it to their advantage to advertise in our magazine, as it is read by the largest number of doctors.

Therefore, in the interest of all concerned, we want more subscribers and advertisers.

**THE WILMINGTON DENTAL M'FG CO., Publishers,**  
1413 FILBERT ST., PHILADELPHIA, PA.

**W. E. AUGHINBAUGH,** • American and Foreign Pat-  
ents, Attorney and Counsel-  
lor-at-Law,

**ROOMS 60, 61, 62 MCGILL BUILDING,**  
**G Street Northwest, WASHINGTON, D. C.**

The Little Schoolmaster in the Art of Advertising:

## Printers' Ink,

A Weekly Journal for Advertisers,

Will be sent to any address from date of order to January 1st, 1894, for

**One Dollar.**

After December 31st, 1892, the subscription price will be advanced to \$2 a year.

ADDRESS,

(Inclosing One Dollar,)

**PRINTERS' INK, 10 Spruce St., New York.**

For five dollars a copy of the American Newspaper Directory for the current year (1,500 pages) will be sent, carriage paid, to any address, and the purchase of the book carries with it a paid-in-advance subscription to **PRINTERS' INK** for one year.

## STEURER'S PLASTIC GOLD.

This is chemically pure gold in a plastic state, which can be manipulated as easily as amalgam.

It will not "ball" but spreads until condensed. Denser fillings can be made by hand pressure than by any other form of gold with the mallet. Holds its color perfectly and can be used in combination fillings with amalgam.

Beware of all imitations which have sprung up within the past few years on account of its great success here and abroad.

**Price, per bottle, 1-16 oz., \$2.50. Cash with all orders.**

**Dr. J. A. STEURER,**

114 West 19th Street, New York City.

**Or Sold at all Dental Depots.**

## IMPORTANT ANNOUNCEMENT

A special offer is made by **The American Temperance Life Insurance Association** to the readers of this journal, "ITEMS OF INTEREST," who are total abstainers. This company offers the means by which persons of correct habits may secure life insurance at the lowest rate, and feel that they are paying only the actual cost, without being taxed for the dissipated habits of drinkers, as users of liquors are not admitted to membership. The advantages of a selected class are apparent and appreciable. If you want the comfort and satisfaction of having good insurance, you should

**CLOSE WITH THIS OFFER.**

**VALID TILL FEBRUARY 1st.**

A large number have written us and taken policies. Don't put the matter off if you are in the least interested in this sort of provision for the loved ones.

### THE DETAILS OF THE OFFER ARE THESE:

All dentists and other total abstainers—both men and women—who become members of **THE AMERICAN TEMPERANCE LIFE INSURANCE ASSOCIATION** before February 1st, will have remitted to them the amount of the **Membership Fee, which varies from \$8.00 to \$20.00, according to the amount of the policy.** In addition to this, they will be given thirty days in which to pay the Annual Dues Fee, which is \$3.00 for each \$1,000 of insurance. By this plan you gain the entire amount of Entrance Fee, and do not even pay the small annual due until after thirty days, thus being insured for that time **absolutely without cost.** The first Mortuary Premium will be payable in sixty days from date of policy and each sixty days thereafter.

The wisdom and necessity of insurance is beyond argument or question. No total abstainer can afford to put off the important matter. **Send to the office at once for a circular and application.** State your age, and an estimate of the yearly cost will be sent you.

**F. DELANO, President.**

**G. E. GODWARD, Secretary.**

**HOME OFFICE, 187 Broadway, New York.**

## JESSOP'S LOCAL ANÆSTHETIC

**For the Painless Extraction of Teeth.**

**Guaranteed Absolutely Safe and Effective. Sample Bottles Sent Free. No Charge for Office Rights. Terms for Exclusive Rights Furnished Upon Application.**

### RECENT TESTIMONIALS:

OCT. 8th, '92.

DR. B. J. PRESSEY,

*Dear Sir:*—I am very much pleased with the Anæsthetic. It works to perfection.

H. G. KEELER, D.D.S., Tuckerton, N. J.

SUMMIT, N. J., SEPT. 29th, '92.

DR. B. J. PRESSEY:

I have been using Jessop's Local Anæsthetic and find it all you claim for it. It affords me pleasure to recommend it to the profession.

Yours truly, GEO. H. PERINE, D.D.S.

DOVER, N. J., SEPT. 29th, '92.

DR. B. J. PRESSEY,

*Dear Sir:*—Anything you choose to say in reference to the Local Anæsthetic, will not be too much for it. My business has more than doubled since I bought the right to use it of you last April. Very truly yours,

A. G. FREEMAN, D.D.S.

BOUND BROOK, N. J., SEPT. 30th, '92.

DEAR DOCTOR:

It affords me great pleasure to send you a few lines in favor of your Local Anæsthetic. I have been using it daily for the past five months, and have found it of great value in giving relief from pain in the extraction of teeth. I am delighted with it, and heartily recommend it to the profession.

Yours truly, JNO. A. CRAIG.

Address, **DR. B. J. PRESSEY, Hammonton, New Jersey.**  
**General Agent for United States.**

LAKEWOOD, N. J., SEPT. 27th, '92.

DR. B. J. PRESSEY,

*Dear Sir:*—I find the Anæsthetic to do all you claim, providing one is skilled in administering it. Respectfully,

A. S. BAILY, D.D.S.

BURLINGTON, N. J., OCT. 12th, 1892.

DR. B. J. PRESSEY,

*Dear Sir:*—I have been using your Local Anæsthetic for several months, and have extracted a great many teeth and like it very much. I consider it a valuable addition to any dentist's office. Very truly yours,

P. J. STYER, D.D.S.

DEAR DOCTOR PRESSEY:

Your Anæsthetic is away ahead of all. I have not used gas or anything else for extracting since I commenced using your Local last April. I use it for everybody—man, woman and child—even in the first teeth. I also use it when filling teeth, when the cavity is very near the gum; also for tying rubber-dam in place. In fact, I could not do without it. It has been a success with me from the first, and not the slightest bad after-effect. I have extracted teeth for two of the M.D.s. here to their perfect satisfaction. Every one has been delighted. You may use my name to any testimonial you choose. Yours truly,

P. H. BROWN, D.D.S., Stamford, Conn.

USED BY ALL SURGEONS.

# CAMPHO-PHÉNIQUE

(C<sub>6</sub> H<sub>6</sub> O.)

EFFICIENT

PAINLESS

UNIRRITATING

GERMICIDES

ANTISEPTICS

# CHLORO-PHÉNIQUE

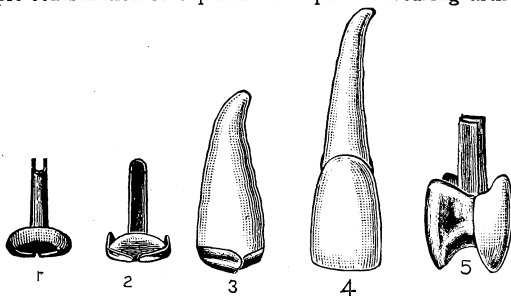
(C<sub>6</sub> H<sub>4</sub> (O H) Cl.)

For Literature and Samples, address Phénique Chemical Co., St. Louis, Mo.

FOR SALE EVERYWHERE.

## THE LUDWIG CROWN ANCHOR.

A simple combination of cap-band and pin for securing artificial crowns to natural roots.



No. 1.—Posterior.

No. 2.—Anterior, showing Groove in Pin.

No. 3.—Showing Anchor attached to Root.

No. 4.—Tooth Attached.

No. 5.—Bicuspid with Porcelain face.

The Anchor is made in one piece of platinum or 22 kt. gold. It is easily and quickly adjusted to the Incisor, Cuspid and Bicuspid Roots. The metal is in no way exposed to view, and affords perfect protection to the root from decay or any mechanical action. When finished and fastened to place, it makes a very strong and perfect operation.

### PRICES.

Platinum, all sizes, each.....\$1 00

Gold, ".....1 50

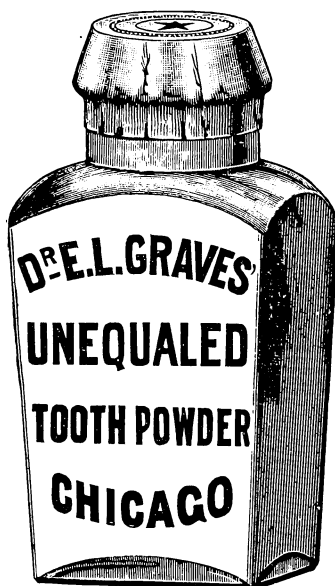
A discount of 10 per cent on dozen orders.

Full directions accompany each order.

Address, R. F. LUDWIG, D.D.S., No. 34 Monroe St., Chicago, Ill.

# BE SURE YOU RECOMMEND OR SELL ONLY THE BEST.

THIS IS THE RESULT OF 22 YEARS' CAREFUL INVESTIGATION BY A PRACTICING DENTIST AND IS GUARANTEED TO BE IN EVERY RESPECT FAR SUPERIOR TO ALL OTHER DENTIFRICES.



IT CLEANS, BEAUTIFIES AND SAVES THE TEETH, BY POLISHING THE ENAMEL, AND NEUTRALIZING AND REMOVING ALL UNHEALTHY SECRETIONS, GERMS, AND OTHER ACCUMULATIONS.

**This contains no Acid, Soap, Potash, Charcoal, Cuttle-bone, Pumice-stone, or any other harsh and injurious ingredients, so universally used in other preparations, which scratch, wear, deface and discolor the teeth, and irritate and disease the gums.**

It will cure and harden all inflamed, soft and bleeding gums, usually in a few days.

No other prepared with such great care and skill, or can effect such perfect results.

Will be put up in plain bottles, with dentist's own name and address on label, without extra charge, in gross lots.

## PRICES:

2-oz. Bottles.....	\$19.20.	Per Gross.....	\$1.60 per doz.
4 " " .....	36.00.	" " .....	3.00 "
1-2, 1 and 5 lb. Cans.....			1.00 per lb.

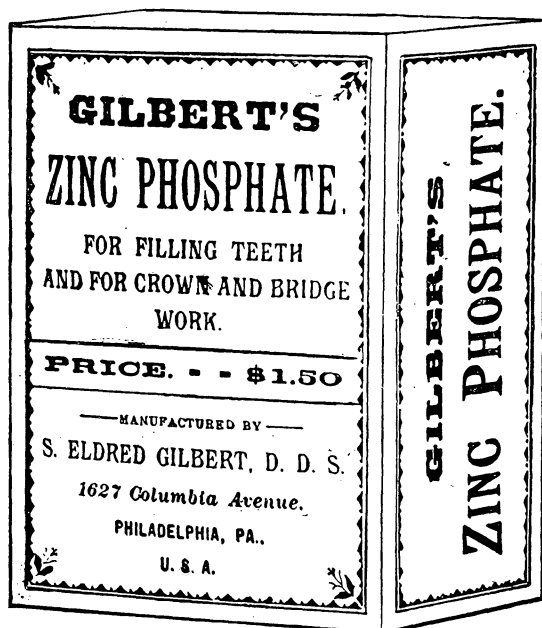
—MANUFACTURED BY—

*Dr. E. L. GRAVES, 7 Laflin St., Chicago, Ill.*

Sold by THE WILMINGTON DENTAL M'F'G CO.

A TRIAL OF

# GILBERT'S ZINC PHOSPHATE



Will convince you, as it has others, that it is the best. Each package contains 1½ ozs. of powder with sufficient liquid.

Gilbert's Non-Conductive Tooth Lining, per package,	\$ .35
Gilbert's Temporary Stopping, per package,	.50
Gilbert's Century Amalgam, per ounce,	2.00
Gilbert's White Alloy,	
½ oz., \$2.00 ; 1 oz., \$4.00 ; 2 oz., \$7.50 ; 4 ozs., 14.00	
Gilbert's Superior Gutta-percha,	3.00

*For sale by dealers generally, or sent by mail on receipt of price.  
Samples of all (except Tooth Lining and Zinc Phosphate) by mentioning  
this Journal.*

**S. ELDRED GILBERT, D.D.S.,**

(Chief Instructor at the Philadelphia Dental College for eight years.)

**1627 Columbia Ave., Philadelphia, Pa.**

# CAULK'S DIAMOND CEMENT

\* FOR \*

## CROWN AND BRIDGE-WORK.

This is a **MEDIUM SETTING CEMENT** and is specially prepared for **CROWN AND BRIDGE-WORK.**

Its hydraulic properties are invaluable for these operations.

For several years I have been making it for private parties who have commended it very highly.

Will  
Harden  
in  
Water  
or  
Saliva.

CAULK'S

TRADE

**DIAMOND**

MARK.

CEMENT

PREPARED EXPRESSLY FOR

**CROWN AND BRIDGE-WORK.**

PRICE, \$1.50.

Has  
no  
Shrinkage  
or  
Expansion.

*Dr. H. A. Parr, the well-known Crown Specialist, of New York, says:*

"For **CROWN AND BRIDGE-WORK**, I find nothing better than your **DIAMOND CEMENT**. I have used it for **THREE YEARS**, and it has given satisfactory results."

This package contains one large bottle each of the powder and liquid.

**L. D. CAULK,**

MANUFACTURER OF

**CAULK'S FILLING MATERIALS,**

1219 ARCH ST., PHILADELPHIA, PA.

Laboratory, CAMDEN, DEL.

# THE MARSHALL ANCHOR DENTURE.

\* \* \* \* \*

Dr. W. H. Marshall, the Inventor and Patentee, will grant Office Licenses for the full term of his patent No 456,626, JULY 28<sup>th</sup>, 1891, to all who will send him TWENTY-FIVE (25) DOLLARS, within six months from the 1st of January, 1893. With the license he will send full directions for the work.

## LOWER ANCHOR DENTURES

are especially valuable, as any firm root or good tooth can be made to hold them firmly in place, so that the wearer can use them with comfort as soon as inserted. As these Dentures are readily removable they can be kept perfectly clean. After the 1st of July, 1893, the doctor will send his agents around yearly to collect licenses from those who do not avail themselves of this opportunity.

All who were in good standing in the Southern Dental Association in August, 1891, have the right to use this patent.

Investigate this Denture, and you will see that it fills a place which no other can fill.

Exclusive rights on reasonable terms.

\* \* \* \* \*

Address,

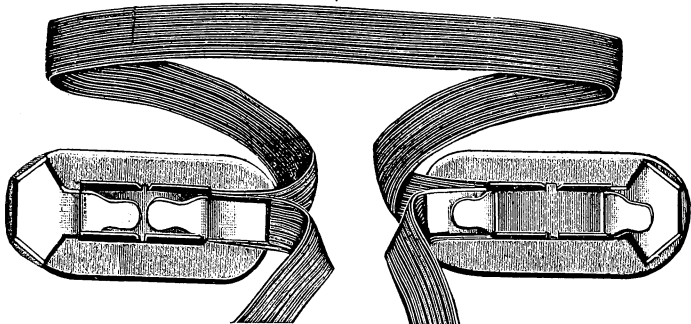
W. H. MARSHALL, D.D.S.,

OXFORD, MASS.

1893

## THE EUREKA RUBBER-DAM HOLDER.:

(A. S. BILLINGS, SOLE OWNER.)

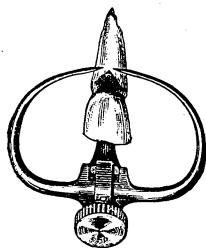


The superiority of this holder over all others consists in the ease and smoothness with which it can be applied. It has a grasp seven-eighths of an inch wide at each side of the mouth, exposing both the labial and lingual surfaces. By this means also, in case of a heavy moustache, by holding the rubber-dam with the end of the finger at the labial surface, the pressure plate can be opened and the rubber-dam tightened or loosened, as desired. *This is the only holder made that the elastic ribbon is nicely adjusted to both clasps without sewing, and can be lengthened or shortened by a very delicate movement of levers and pressure plate, always holding the ribbon flat and smooth.* Price, nickel, \$1.00.

### The New Hatch

#### CERVICAL RUBBER-DAM CLAMP.

For Labial and Buccal Cavities.



This clamp is designed for use in filling that class of very troublesome cases, where the cavity extends very high on the labial or buccal surface of the root. It is *Universal* as it is applicable to both sides of either maxillary.

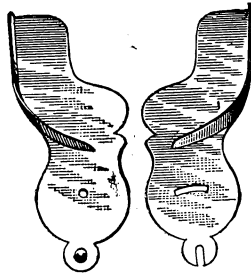
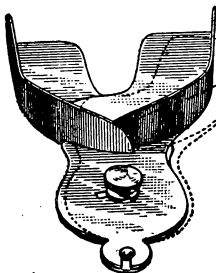
It is fixed in position and retained by a thumb-screw, by which the pressure can be regulated at will. The bearing upon the gum being only by the small points, its application is made with the minimum of pain to the patient, and, except in extreme cases, is absolutely painless after it is in position. Price, \$3.00.



### The Combination

#### IMPRESSION CUP.

This is adjustable and furnishes the foundation for making any cup desired. It is made in two pieces, working on a pivot, and by means of a set-screw, may be opened to any extent desired. It may also be separated so as to form partial right and left cups. Price, best German silver, \$1.00.



## THE C. C. DENTIMETER.

FOR THE ACCURATE MEASUREMENT OF TEETH OR ROOTS FOR CROWN- AND BRIDGE-WORK.

PRICE, 50 CENTS.

### C. C. D. P. CO.'S

#### PURE ROLLED ALUMINUM.

A CAREFULLY SELECTED ARTICLE FOR DENTAL PURPOSES.

Price, per package, with full instructions for annealing, swaging and polishing, \$1.00.

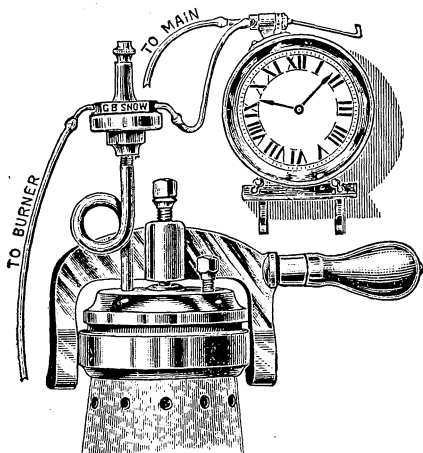
FOR SALE AT ALL DENTAL DEPOTS, OR BY

**The Chase Combination Dental Plate Company,**

A. S. BILLINGS, Manager.

Omaha, Neb.

# SNOW'S GAS REGULATORS

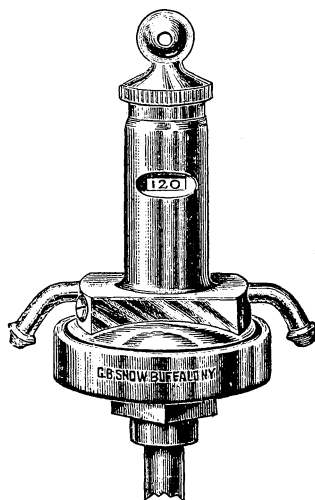


THE NEW MODEL  
REGULATOR.

The adjustment of the **NEW MODEL** is made when a change is desired by the thermometer, and after the proper heat is attained. It is then as easily accomplished as turning an ordinary gas cock. The

## INDEX REGULATOR

shows the steam pressure to which it is set, by the figures seen at the opening in the case. A change can be made when desired, before vulcanizing commences; saving the time of watching the thermometer while heating up. The **Timing Attachment** controls the time of vulcanizing, and can be set for any time from one minute to five hours.



THE INDEX REGULATOR.

## PRICES.

New Model Regulator, with Timing Attachment.....\$8.00

Index Regulator, with Timing Attachment..... 10.00

Manufactured only by

**GEORGE B. SNOW,**  
Buffalo,        =        =        =        New York.

*Send for Circulars.*

# Old Methods Must Give Way to the New!!

---

MORE THAN 100 DENTISTS ARE NOW USING THE



## IMPROVED METHOD FOR PAINLESS FILLING.

---

"The First and Only Process Sufficient to that End Yet Devised."

(See Advertisement in September ITEMS OF INTEREST.)

### HERE IS SOME MORE OF THE "EVIDENCE."

PROVIDENCE, R. I., October 10th.  
Owing to pressure of business I have neglected replying to your note of inquiry in reference to my success with your Method for painless excavating. I cannot well express the satisfaction it has given me from the first; and, as its value becomes more generally known, it will be used by all dentists—if they are fortunate enough in getting hold of it. You are at liberty to use my name, and to say that I regard your Method of greater worth to both patient and dentist than anything yet offered to the profession.

W. H. TILLINGHAST, D.D.S.

SULLIVAN, IND., October 14th.  
I have been using your new Method for painless filling for the last two months, and am more than satisfied. I have more than doubled the receipts over same two months last year. I would not be without it for one thousand dollars in cash. It makes me money and saves me many hours of worry and trouble with timid, nervous patients, besides the satisfaction of knowing that my patients are pleased and benefited as much as myself.

L. A. STEWART, D.D.S.

JOLIET, ILL., October 25th.  
After four months' use of your Painless Method in our office, we take much pleasure in saying, that we have yet to see it make its initial failure. It "does the business" precisely as you claim for it, and the man who buys the Method should order two or three extra dental chairs at the same time. Refer any and all to us at any time.

STEWART & STEWART.

OMAHA, NEB., November 4th.  
Replying to your note of November 1st, I can best refer you to my letter of June 10th last, in which I said "I am now using the Hale Method in my practice, and would not be without it for five thousand dollars. All other preparations both old and new I have tried, and found them all absolute failures; Dr. Hale's is a complete success." I cannot do better than reiterate my opinion of it as expressed at that time. It has been a great success in my hands from the first.

DR. G. W. WERTZ.

LOUISVILLE, KY., November 8th.  
You can put me down as an enthusiast on the subject of painless filling; and also that I know the "Hale Method" to be not only the original, but the only successful one yet offered to the profession.

C. W. WALKER, D.D.S.

SALT LAKE CITY, November 10th.  
You ask if I can "fill teeth without pain." Well, I should say yes, and so can any man who has your Method, no matter how sensitive the teeth. I only regret not getting hold of it before.

HECTOR GRISWOLD, D.D.S.



### BEWARE OF IMITATORS.

Address all Communications to

C. E. HALE, D.D.S., Grand Opera House, St. Paul, Minn.

# JUST PUBLISHED.

# QUESTIONS and ANSWERS,

Relating to the Entire Curriculum of the Dental Student.

- Part I. Pertaining to the Freshman Course, \$2.00.  
 Part II. Pertaining to the Junior Course, \$2.50.  
 Part III. Pertaining to the Senior Course, \$2.50.

By FERDINAND J. S. GORGAS, A. M., M. D., D. D. S.

This work consists of questions and answers on Anatomy, Physiology, Dental Histology, Materia Medica and Therapeutics, Chemistry, Oral Surgery, Dental Pathology, Operative Dentistry, Prosthetic Dentistry, Metallurgy, Plastic and Metal Work, Porcelain-crown, Cap-crown Bridge-work, and Atmospheric Pressure, Deformities of Palates, etc., etc.

Publishers: Snowden & Cowman, Dental Depot, 9 W. Fayette St., Baltimore, Md.

"MESSRS. SNOWDEN & COWMAN:

Your books of Questions and Answers for Dental Students received. I have looked over the parts connected with my College Department—Operative Dentistry, and Dental Physiology and like them much. I trust the series will meet with much favor, as of it they are worthy." C. N. PIERCE, Dean and Prof. of Dental Physiology,  
 Dental Pathology, and Operative Dentistry, Pennsylvania College of Dental Surgery.

"Dr. Garretson begs to acknowledge Messrs. Snowden and Cowman's kindness in sending him Prof. Gorgas' 'Questions and Answers.' The work of compilation is admirably done, and there can be no doubt that students will make large use of the books as aids to preparation for graduation examinations. Practitioners should find in them hints directing to free and wide reading. Dr. Garretson asks that his compliments and congratulations be given to Prof. Gorgas." From DR. JAMES F. GARRETSON,  
 Prof. of Anatomy and Surgery, and Dean of Philadelphia Dental College.

"We will place the 'Questions and Answers' before our students, and call their attention to them, as we believe they are a good thing, not only for Students, but for older members of the profession." From Profs. L. P. HASKELL, President, and  
 A. M. MARKLE, Vice President, The Haskell Post Graduate School of Prosthetic  
 Dentistry, Chicago, Ill.

"I think all of the work will meet with approval everywhere."

W. H. WHITSLAR, M. D., D. D. S., Secretary, and Prof. of  
 Dental Anatomy and Pathology, Western Reserve University Dental Department.

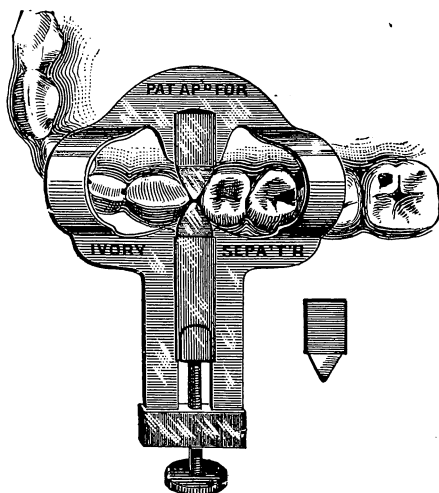
"The work will be a valuable one for students and should be used in all our Colleges. I will recommend the work to our students, and suggest that each one provides himself with a copy." Prof. J. TAFT, Dean of University of Michigan,  
 College of Dental Surgery.

"They are the best books of the kind I have seen, and I am recommending students to purchase them." FRANK ABBOTT, M. D., Prof. and Dean  
 of New York College of Dentistry.

"Everything coming from the pen of Prof. Gorgas is always good, and I shall take pleasure in recommending the work for the use of the student." Prof. A. O. HUNT, Dean and Professor of Metallurgy, Dental Prosthesis,  
 and Supt. of Clinics Dental Department of State University of Iowa.

# IVORY'S UNIVERSAL DOUBLE BOW SEPARATOR.

PATENTED, SEPTEMBER 16TH, 1890.



The above Separator is so easily adapted to the teeth, front or back, that it has *at once* become popular. The force of the screw being applied direct, it will turn with the thumb and finger with very little effort. The beveled sides of the wedges facing the gum prevent any slipping of the instrument, to cause unnecessary pressure on the gum, yet holding the gum and rubber well away from the margin of the cavity. The points of the wedges will pass each other.

## ADVANTAGES:

The double bow steadies the instrument, preventing lateral motion, assisted by the beveled edges of separating points. The bows are wide apart, giving plenty of room.

Finishing strips can be used by passing one end between the outside frame and the teeth.

Its universality of adaptation is a mighty factor. It will be noticed that the inside separating points can be removed, and longer or shorter points substituted, as the case may require. (We furnish two with each instrument.) These are all we have found necessary, the longer of the two for anterior teeth and the shorter for molars and large bicuspsids, but in case an extra short point would be required for extraordinarily large teeth, we can supply an additional wedge any time. In very narrow arches if the point should be required to be longer so as to bear on the inside of the teeth, by moving it forward and inserting a piece of wedge wood back of it, you can make it any desired length.

The front wedge is attached to the screws by a swivel joint, moves back and forth in a groove by means of the thumb screw, and is always easily operated. Being quickly applied it is invaluable in getting space for examination, immediate filling, for finishing strips, removing dark stains on proximal surfaces, etc., or removing old amalgam fillings that have become loose in cavity of teeth. The general advantages are to save time, to help you do good work, to allow you to fill proximal fillings in the first stages of decay, and a special advantage of almost doing away with ligatures around the teeth.

To hold the cheek back while filling back molars, and to hold the rubber well away from the gingival margins, and also to prevent the necessity of poorly finished fillings. Thus securing you in the good will and estimation of your patients.

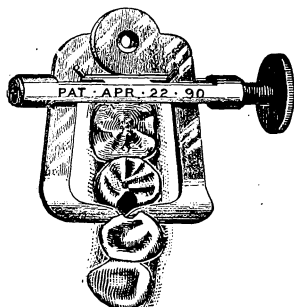
By using menthol on the gums before applying or removing the separator, and treating the gums with a mixture of iodine and menthol afterwards, there will be no danger of any injurious after effects from immediate separation, and very little or no pain in separating.

PRICE.....\$3.50

J. W. IVORY, 922 Arch Street, Philadelphia, Pa ,

Entrance Fayette Street.

# DR. ELLIOTT'S SEPARATOR.



Not only for getting space for filling teeth is this Separator useful, but for examinations, cleaning, separating after filling for strips, disks, etc. It is universal in its application, is easily adjusted, and is out of the way more than any other Separating instrument in the market. Screw operates in either end of yoke.

## INSTRUCTIONS.

Practically the Separator as shown in the cut is placed on the teeth wrong. To separate for space here indicated, the hinged part of the Instrument would be over the Incisor, instead of the Molar Teeth. The screw would be required to be taken out and put into the other

end of the bar, as it works in either end according as it is the most convenient for the operation. The lettered side of the Separator faces the operator. A spring opens the jaws as the screw is slackened. The jaws are arranged to pass one another, and beveled to prevent any tipping of the instrument forward. The rubber is held out of the way by the extending blades. The force is applied by the thumb-screw.

"We have had the pleasure of thoroughly testing Dr. Elliott's Separator (manufactured by J. W. Ivory), and unhesitatingly say that it is far superior, in our judgment, to any we have tried, for incisor teeth. It is simple, easily adjusted, and entirely out of the way, so that the operator has free use of his instruments. It is indeed worthy of a place in every Dental Office, as all who have used it will testify." B.

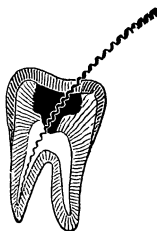
D. R. R. ANDREWS, of Cambridge, Mass., at a Boston Convention, said: "If the Drs. at this meeting knew the value of that instrument, (naming the Elliott Separator,) there would not be one of them go away without it."

Price, = = = = = \$2.50

# IVORY'S NERVE EXTRACTORS.

Patented January 6th, 1891.

These extractors are especially advantageous for the anterior teeth. They act by winding the nerve-fibres or tissue into the coils of which it is composed, thus taking a firm hold on the vessels, bringing them away bodily. They are strong and flexible, readily following the contortions of the canals. They are mostly made of steel. Those made of iridium and platina combined possess the advantages of non-corrosibility with certain chemicals, and having all the advantages of toughness, etc., of which the steel Extractors consist. They are also very fine for medicating and treating teeth; a few shreds of cotton wound on the tip will carry medicine to the apex of the root. This cotton can be removed readily from the Extractor again.



Price, per dozen, Steel, = = = = = \$ .75  
 " " half dozen, Platina and Iridium, = 1.00

SOLD BY

J. W. IVORY,

MANUFACTURER,

No. 922 Arch Street, = Philadelphia, Pa.

MAIL ORDERS PROMPTLY ATTENDED TO.

XXXV

# Something \* NEW \* AND \* OF \* INTEREST \* TO \* THE \* Profession.

## DEODORIZED IODOFORM COMPOUND.

Iodoform, Acetate of Morphia, Aconite, Ox. Zn, Oil Eucalyptus, Cinnamon, Cloves.]

**For the TREATMENT and PERMANENT FILLING, or DRESSING  
of Root Canals.**

This Compound is the result of eight years practical experiment, and I confidently assert that those who use it will be more successful in *saving* teeth than those who do not.

I claim for Iodoform Compound more satisfactory *present results* and less liability to *recurrent*, or after trouble, when roots are *permanently* filled or dressed with it.

PROPERTIES: Has the smoothness and consistency of an ointment. Can be lifted and carried on the point of the finest probe without slipping or running back, thus permitting deliberate and accurate placing. At the temperature of the mouth it softens sufficiently for the working into and filling of any root canal. Its *keeping* qualities are perfect.

General Directions, with each box, for the "*Treatment of Diseased Teeth.*" To many dentists, these alone will be worth the price of the medicine.

By mail, to any address, - - - - - \$1.00 per box.

AT ALL DENTAL DEPOTS.



## CAPSICUM and COMPOUND BAGS.

Patented July 29th, 1884.

*The FIRST and ONLY PATENT of the Kind Ever Granted.*

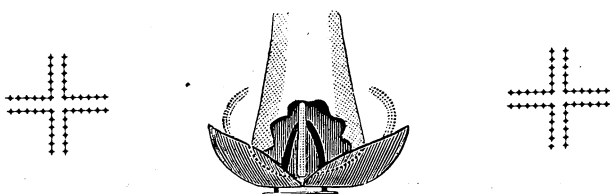
[I was the first to introduce them to the profession, through the S. S. White Co., in 1884, and contributed to the *Dental Cosmos*, 1883, No. 12, the first and only essay on the subject: "The Use and Application of Capsicum Bags in Dental Irritation."]

The purest and strongest drugs, finely powdered, are held in a small, linen bag, which *prevents* the spreading of particles in the mouth, and secures the local and powerful action of the drugs used. (A bag will last from one to three days.) A plaster presents an exposed surface, the drugs loosen from it and spread in the mouth. In Capsicum Bags, the medicines used being finely powdered and free from *gumming* mixture, the saliva acts thoroughly upon *each particle*, extracting its *active principle*, this alone passes through the linen and acts upon the gum tissues in contact.

The steady and powerful irritation demanded in the treatment of *active abscess*, or other *violent* inflammation, requires the application of some reasonable quantity or bulk of the drugs; therefore, a bag or container of some kind *must* be used. It must be evident to all that a plaster, having *no* bulk, and presenting only a small, exposed surface of *adulterated* drugs, *cannot* excite powerful or much irritation. I experimented with plasters years ago, and discarded them as worthless, but good-looking. Therefore, if you desire a pure, powerful and reliable *counter-irritant*, demand Capsicum Bags, and do not accept plasters, as being "*just as good.*"

By mail, to any address, - - - - - \$1.00 per box.

WM. C. FOULKS, D.D.S.,  
32 NORTH NINETEENTH ST., PHILADELPHIA, PA.



## THE DENTAL BREATH-GUARD.

SIMPLICITY AND PERFECTION.

Patented July 29, 1884.

No *progressive* dentist can afford to be without it.

After one trial patients *demand* its use.

Protection to dentist and patient alike.

Easy of adjustment as the ordinary eye-glass. Small, light and not unsightly. Use it once, and you will never lay it aside. Have used mine since 1884. Lawyers, physicians, ministers and ladies have worn it in my office for *my protection*, and I for *their safety and comfort*, and they have never felt offended when asked to assist in such sanitary protection. Explain plainly *why* you use it, and any sensible person will cheerfully assist you. You can work longer and will feel better if you use it; and in a short time you will as soon try to work without instruments as without your guard.

Each dentist should have two, his own and one for patients. They will last a life-time.

Price, by mail, to any address,

Black Rubber, Gold-Plated Spring and Pins,	-	-	-	\$5.00
Plain Blue Steel Spring and Pins,	-	-	-	4.00
Cheaper Guards,	-	-	-	3.00

Made to order in Gold or Silver. Prices quoted when order is given.

AT ALL DENTAL DEPOTS.

## ARSENICAL COMPOUND.

[Nicotine, Arsenious Acid, Aconite Root (Powdered Extract), Morphia, Acetate, mixed with Oils, Cloves, etc.]

Every dentist will be pleased to hear of an Improved Arsenical Compound. This mixture, like the iodoform, can be lifted and carried on the point of the finest probe without dropping or running back, thus permitting the operator to carefully and deliberately apply the medicine to the exposure. This practical and very desirable quality distinguishes it from all other *moist* arsenical preparations.

The nicotine seems to have a powerful *laxative* and *narcotic* effect, while expediting and increasing the arsenical impression, resulting in a *quicker* and *less painful* death of the *whole* nerve. Does not change form with age.

I believe this Arsenical Compound to be the most effective, desirable and reliable of any before the profession, therefore, I can confidently recommend it. Lower rates made to colleges.

Price, by mail, to any address, - - - \$1.00 per box.

AT ALL DENTAL DEPOTS.

WM. C. FOULKS, D.D.S.,  
32 NORTH NINETEENTH ST., PHILADELPHIA, PA.

XXXVII

ESTABLISHED 1865.

# Samson Rubber.

STRONGEST AND MOST UNIFORM RUBBER MANUFACTURED.

TRADE-MARK

No. 3788.



Registered

June 20th, 1876.

## Price-List of Dental Rubbers, Weighted Rubbers for Lower Sets, and Gutta-Percha.

No. 1 and No. 2 Rubber.....	per lb.,	\$2.25
Pure Black and Jet Black Rubber. ....	"	2.25
Para Black and Gutta-Percha Base Plate.....	"	2.25
In 10 lb. lots....	per lb.,	\$2.00
In 25 lb. lots....	per lb.,	\$1.90
In 50 lb. lots.....	per lb.,	\$1.75

<b>SAMSON and MAROON RUBBER....</b>	<b>per lb.,</b>	<b>\$2.75</b>
Flexible or Palate Rubber.....	"	2.75
Vulcanite Gutta-Percha.....	"	2.75

In 5 lb. lots....	per lb.,	\$2.50
In 10 lb. lots....	per lb.,	\$2.25
In 25 lb. lots....	"	2.00
In 50 lb. lots....	"	1.80

[**MOTTLED RUBBER, THE FIRST RUBBER I MANUFACTURED,  
CAN BE MADE IN ALL THE ABOVE SHADES.**

No. 1, No. 2, and Black Weighted Rubbers, Mixed with Pure Metal.....	per lb.,	\$4.00
---	----------	--------

## ADAMANTINE FILLING OR STOPPING.

These Rubbers being made from carefully selected Para Gum, and Manufactured  
by Improved Processes, I can guarantee them to give entire  
satisfaction to the user, and retain a high polish.

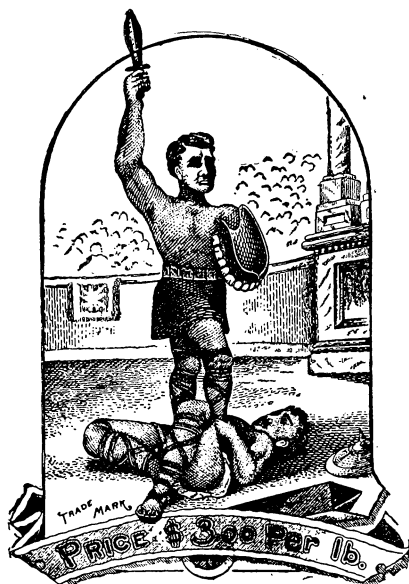
*For any Further Information, Address,*

**EUGENE DOHERTY,**

110 and 112 Kent Ave., Cor. North Eighth St.,

BROOKLYN, E. D., N. Y.

# THE "GLADIATOR" RUBBER



is absolutely the strongest rubber ever made for a dental base; it makes an exceedingly light plate of beautiful color, and owing to its flexible and elastic qualities a person wearing a plate made from this rubber need have no fear that the gums will become either irritated or sore. Another great feature of this rubber is, that it can be used without fear of either shrinking, checking, or breaking the blocks.

I take pleasure in calling the attention of the profession to my reliable and well-known brand of

## IMPERIAL STANDARD DENTAL RUBBERS.

NO.	PER LB.	NO.	PER LB.
1. Light Orange, . . . . .	\$2.25	7. Nubian, or Jet Black, . . . . .	\$3.00
2. Medium Orange, . . . . .	2.25	8. Ordinary Black, . . . . .	2.25
3. Dark Orange, . . . . .	2.75	9. Pink (light shade), . . . . .	5.00
4. Mottled (light red), . . . . .	2.75	10. Pink (medium shade), . . . . .	5.00
5. Mottled (dark red), . . . . .	2.75	11. Pink (deep shade), . . . . .	5.00
6. Maroon, . . . . .	2.75	12. Brown Rubber, . . . . .	3.00

Of these rubbers I direct your special attention to the following:

### PINK.

(GENUINE AMERICAN MANUFACTURE.)

I am positively the only manufacturer of pink rubber in this country, and guarantee it superior in color, strength and finish to any of the foreign makes. In color the No. 9 (LIGHT SHADE) is particularly remarkable for its gum or flesh-like resemblance.

### MAROON.

This rubber is remarkable for its beautiful maroon shade, which, combined with great strength, elasticity, and finish produces a very desirable plate. It is highly recommended by some of the most prominent dentists in the country.

### MOTTLED.

This rubber, owing to its beautiful mottled appearance (variegated in color), makes an exceedingly pretty plate. Its other chief merits are increased elasticity, strength and finish.

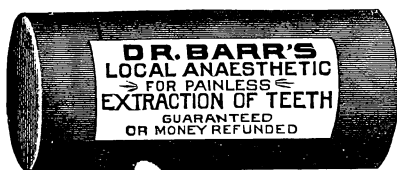
I desire to state that I am the original INVENTOR of the "Imperial Standard" Pink, Maroon and Mottled rubbers, and warn the profession against spurious imitations which have lately been introduced.

## IMPERIAL RUBBER WORKS,

8 COLLEGE PLACE, E. J. MCCORMICK, PROPRIETOR, NEW YORK.

**\$1.00.** Upon receipt of this amount will send by Mail, Post-paid, Sample Package containing all the different Rubbers.

# PAINLESS DENTISTRY.



A two-ounce bottle of Barr's Local Anaesthetic sent prepaid, to any address in the U. S. for \$1.00, and guaranteed to make teeth extracting painless or money refunded, by Dr. E. T. BARR, Manufacturer and Proprietor, Bowling Green, Ky.

**DIRECTIONS.**—Dry the gums thoroughly, then apply the "Anaesthetic" to the gums around the tooth with a pledget of cotton; let it remain for one minute, then instantly remove the tooth.

## TESTIMONIALS:

DEAR SIR:—I have been extracting teeth with your Local Anaesthetic for two years, and in that time have used more than fifty bottles. I concluded to try a battery, therefore sent to New York and purchased one, for which I paid \$42.50. It came. I set it up, thinking it would be all I needed in the future. I kept it behind my chair just two weeks trying to extract one tooth without pain, but I never had any success with it, so I returned to my old friend, your Anaesthetic, uncorked a new bottle, and it worked like a charm. I never expect to use anything else in the extraction of teeth. Allow me to say that I believe it to be the best thing known, and trust every one in our profession will use it. Very respectfully,  
G. H. ELLIS, D.D.S., Maxwell, I.

DEAR SIR:—I have given your Anaesthetic a fair test and find it works like a charm. I feel that it is quite an acquisition to my medicine case. In fact, I can't do without it. I extracted eleven teeth to-day for one lady at a single sitting, who thought she could not have one taken out without chloroform. I use it daily. You may rest assured I will do all I can to increase the sale of such a valuable remedy. Enclosed find \$1.00 for another bottle.  
J. E. BREEDING,  
San Antonio, Texas.

DEAR SIR:—I have tried your Anaesthetic until I am satisfied it will do what you claim for it. Please send me another bottle and oblige.  
THOS. M. TALBOTT,  
427 7th St., Washington, D. C.

DEAR SIR:—I consider your Anaesthetic the best thing that has ever been invented for painless extraction.  
W. W. LAZEAR,  
2208 Wabash Ave., Chicago, Ill.

### To whom it may concern:

We, the undersigned citizens of Bowling Green, Ky., take pleasure in saying that we have known Dr. E. T. Barr since he came to this city, about ten years ago, and know his reputation to be that of an esteemed gentleman and a popular dentist, and a thoroughly trustworthy business man.

JOHN E. DUBOSE, City Attorney.  
E. H. PORTER, Postmaster.  
G. E. TOWNSEND, Druggist.

For sale in London, Eng., by the Dental Mfg. Co.; A. H. Billard, Paris, France; Paul Buss, Berlin, Germany; Flavell & Roberts, Brisbane, Australia, and dealers everywhere. Price \$1.25 in all foreign countries.

DEAR SIR:—I have tried your Local Anaesthetic and like it better than anything of the kind I have ever used. I enclose \$1.00 for another bottle.  
Yours respectfully,  
A. W. TERRY, Hamburg, Ark.

DEAR DOCTOR:—Will say I have been using your Local Anaesthetic for more than a year and like it very much.  
Yours respectfully,  
Dr. J. L. CILEY, Upper Lake, Cal.

DEAR DOCTOR:—I have used your Local Anaesthetic with good success.  
Respectfully,  
S. C. LIGETT, Blanchester, O.

DEAR DOCTOR:—I have been using your valuable Local Anaesthetic for nearly a year and find it all you claim for it. Would not be without it a single day. Yours truly,  
S. B. CADWELL, Wheeling, W. Va.

DEAR SIR:—Your Anaesthetic has proven quite a success, and in many cases, has taken the place of chloroform at my office.  
Dr. E. KNAPP, Evansville, Ind.

DEAR DOCTOR:—It affords me pleasure to recommend your Local Anaesthetic. I have used it in several cases, and find it of great value, and must say I am highly pleased with it. Yours truly,  
G. D. VAN ARNAM,  
West Winchester, Ont., Can.

DEAR DOCTOR:—I think your Local Anaesthetic the best I have ever used.  
Yours truly,  
G. N. WILLIAMS, Germantown, Pa.

DEAR SIR:—I am now using the second bottle of your Anaesthetic, which I find a convenient and useful article in my practice.  
J. ALBERT KIMBALL, D.D.S.,  
28 West 26th St., New York.

G. S. HOLLINGSWORTH, City Clerk.  
J. F. McELROY, M.D.  
P. J. POTTER & CO., Bankers.

**TRY Dr. Barr's Adamantine WHITE ALLOY**

In order to introduce it to the profession, I will, on receipt of 25 cts., send a sample that you may thoroughly test it before purchasing in larger quantities. \$3.00 per ounce, or \$1.50 half ounce. For sale by all Dental Dealers or sent post paid on receipt of price, by  
**DR. E. T. BARR, Manufacturer and Proprietor,**  
BOWLING GREEN, KY.

# ✧ INDIANA ✧ DENTAL ✧ COLLEGE, ✧

INDIANAPOLIS, IND.

Fourteenth Annual Session Will Begin the First Tuesday in September, 1892,  
and End the Last Friday in March, 1893.

## THE BRANCHES TAUGHT ARE:

Operative Dentistry, Pathology and Development of the Teeth, Mechanical Dentistry, Physiology, Histology, Anatomy, Materia Medica, Therapeutics, Pathology, Chemistry, Metallurgy, Oral Surgery, Biology, Microscopy, Bacteriology, Neurology, Dissecting.

## CROWN, BRIDGE, AND PORCELAIN-WORK RECEIVE SPECIAL ATTENTION

This College is newly and fully equipped with all approved appliances for teaching and actual dental practice.

Seven hours every day (Sunday excepted) are given to lectures, recitations, and actual practice. Our clinics are so full and complete that every student is guaranteed practical experience with almost every form of dental work.

Indianapolis presents all the advantages of larger cities without their accompanying disadvantages. Good and proper living, on account of natural gas and other natural advantages, will be found cheaper here than elsewhere.

WRITE FOR CATALOGUE TO

J. N. HURTY, Secretary,  
Indianapolis, Ind.

# VANDERBILT UNIVERSITY.

## DEPARTMENT OF DENTISTRY.

Preliminary Course begins First Monday in September.

Fall and Winter Term begins First Wednesday in October,

AND CONTINUES FIVE MONTHS.

For Catalogue and other information, address

W. H. MORGAN, M.D., D.D.S.,

No. 211 North High St., Nashville, Tenn.

# NORTHWESTERN UNIVERSITY DENTAL SCHOOL,

**No. 104 Twenty-second Street,**

**CHICAGO, ILL., U. S. A.**

The Session for 1892 and 1893 begins **September 27th**, and continues for seven months.

For Catalogues and other information, address,

**EDGAR D. SWAIN, D.D.S., Dean,**

**EDMUND NOYES, D.D.S., Secretary,**

**No. 65 RANDOLPH STREET.**

## LOUISVILLE \* COLLEGE \* OF \* DENTISTRY.

**DENTAL DEPARTMENT**

**OF THE**

**CENTRAL UNIVERSITY OF KENTUCKY,**

**LOUISVILLE, KENTUCKY.**

**Session Opens January 2, 1893, and Continues Six Months.**

Three years' graded course. Superior clinical facilities.

Favorable climate and season of the year.

**JAS. LEWIS HOWE, Dean.**

## THE HASKELL POST-GRADUATE SCHOOL

**OF**

**PROSTHETIC DENTISTRY,**

**211 WABASH AVENUE,**

**CHICAGO.**

**L. P. HASKELL, President.**

**A. M. MARKLE, Secretary.**

This School, with a large and well equipped Laboratory, including Electric Motor for its Lathes, is open every month, **except September**. and Students may enter at any time. Instruction given in all that pertains to Prosthetic Dentistry, including **Crown and Bridge Work, Continuous Gum Work, and Porcelain Inlays**. One month of technical instruction under the personal supervision of **PROF. HASKELL** and assistants, has been found sufficient time for these specialties. **Tuition, Fifty Dollars**. The Laboratory is prepared to construct Dentures of all kinds in the most finished manner for the profession. Send for Price-list.

"I would not take a thousand dollars for what I have learned in your School."

G. F. M., IOWA.

"I can heartily endorse your School and its system, being under the supervision of Dr. Haskell, one of the best instructors theoretically and practically, that this country affords. It could not be otherwise than an ideal school."

W. O. V., ILLINOIS.

"I learned more in the short time I was there than I did in the two courses in College."

R. R. V., MISSOURI.

"What I have achieved is more than I expected. I go home a wiser, a better man, and shall ever remember all the little hints you kindly gave while working under your supervision."

DR. J. N. WIEDE, BERLIN.

"I want to express my appreciation of the work your School is doing for the profession and of Dr. Haskell's ability to impart instruction."

E. B. S., TEXAS.

"I consider a course of instruction in your School essential to a dental education."

T. B., INDIANA.

"I can freely recommend your School. Its methods and system of teaching are good."

W. S. F., MICHIGAN.

"I consider your methods of teaching Prosthetic Dentistry far superior to those taught in Dental Colleges."

C. B. C., KANSAS.

# Pennsylvania College of Dental Surgery,

Twelfth Street, between Market and Arch, corner Filbert.

THIRTY-SEVENTH ANNUAL SESSION, 1892-93.  
OPENS OCTOBER 1, 1892.

## FACULTY AND AUXILIARY INSTRUCTORS.

J. EWING MEARS, A.M., M.D., Professor of Anatomy and Surgery.  
C. N. PEIRCE, D.D.S., Professor of Dental Physiology, Dental Pathology, and Operative Dentistry.  
WILBUR F. LITCH, M.D., D.D.S., Professor of Prosthetic Dentistry, Materia Medica and Therapeutics.  
HENRY LEFFMANN, M.D., D.D.S., Professor of Chemistry and Metallurgy.  
ALBERT P. BRUBAKER, M.D., D.D.S., Professor of Physiology and General Pathology.

ALONZO P. BEALE, D.D.S., Lecturer and Demonstrator of Prosthetic Dentistry.  
PERCIVAL E. LODER, M.D., D.D.S., Demonstrator of Anatomy.  
G. W. WARREN, D.D.S., Chief of the Clinics and Demonstrator of Operative Dentistry.  
I. N. BROOMELL, D.D.S., Demonstrator of Prosthetic Dentistry.  
ALEX. P. LONG, D.D.S., Demonstrator of Operative Dentistry.  
E. T. DAVIS, D.D.S., Demonstrator of Operative Dentistry.  
WILLIAM BEAN, A.M., Demonstrator of Chemistry.  
J. HOWARD GASKILL, D.D.S., Demonstrator of Prosthetic Dentistry.  
FREDERICK R. BRUNET, D.D.S., Demonstrator of Prosthetic Dentistry.  
I. V. MERSHON, D.D.S., Demonstrator of Operative Dentistry.  
E. A. KRETSCHMAN, Demonstrator of Modeling.  
W. K. THORPE, D.D.S., Demonstrator of Operative Dentistry.  
J. F. WESSELS, D.D.S., Demonstrator of Operative Dentistry.

## CLINICAL INSTRUCTORS.

Dr. F. M. DIXON,	Dr. C. S. STOCKTON,	Dr. JOHN B. WOOD,
Dr. J. N. FARRAR,	Dr. T. F. CHUPEIN,	Dr. C. E. FRANCIS,
Dr. W. G. A. BONWILL,	Dr. W. H. TRUEMAN,	Dr. E. C. BAXTER,
Dr. A. L. NORTHROP,	Dr. J. HAYHURST,	Dr. A. H. BROCKWAY,
Dr. C. PALMER,	Dr. J. G. TEMPLETON,	Dr. A. B. ABELL,
Dr. R. H. SHOEMAKER,	Dr. W. R. MILLARD,	Dr. R. HOLLENBACK.
Dr. CHAS. F. BONSTALL,		

This College has accepted the requirements of the National Association of Dental Faculties with regard to admission and graduation of students. (See announcement for 1892-93, which can be procured from the Dean.)

## THE SPRING AND FALL SESSIONS.

THE SPRING COURSE commences on the second Monday in March, and continues until the first of July. Fee, \$50, which will be credited upon the fee for the regular session.

THE FALL COURSE will commence September 1, and continue until the first of October, and will be free to those who matriculate for the regular session.

Attendance upon the Spring and Fall Courses will be deemed equivalent to the term of pupillage under a private preceptor.

## THE REGULAR SESSION

Will commence on October first, and continue until the first of March ensuing. Twenty lectures will be delivered each week on the various branches taught.

## CLINICAL PRACTICE.

Lecture hours excepted, general clinical practice is available for the student continuously through the day, ten months of the year. Competent instructors are always present.

## GRADUATION IN MEDICINE.

By an arrangement with Jefferson Medical College, such students as may desire to do so, can, if found qualified, obtain the two degrees, in Dentistry and Medicine in four years. Students desiring to graduate in medicine are required to notify the Dean of their intention at the beginning of their second course.

## FEES.

Matriculation (paid but once),	- - - - -	\$5.00
For each Course (Demonstrators' Ticket included),	- - - - -	100 00
Dissecting Fee,	- - - - -	10.00
Diploma Fee,	- - - - -	30.00

Board can be obtained at from \$4.00 to \$6.00 per week.

The Instruments and Tools required can be procured for from \$35.00 to \$45.00. This sum does not include the price of dental engine.

For further information, address

C. N. PEIRCE, D.D.S., Dean, 1415 Walnut St., Philadelphia.

# UNIVERSITY OF PENNSYLVANIA.

## Department of Dentistry.

Thirty-sixth Street and Woodland Avenue, Philadelphia, Pa.

### FACULTY.

WILLIAM PEPPER, M.D., LL.D., Provost, and *ex-officio* President.

CHARLES J. ESSIG, M.D., D.D.S., Professor of *Mechanical Dentistry and Metallurgy*.  
 EDWIN T. DARBY, M.D., D.D.S., Professor of *Operative Dentistry and Dental Histology*.  
 JAMES TRUMAN, D.D.S., Professor of *Dental Pathology, Therapeutics and Materia Medica*.  
 THEODORE G. WORMLEY, M.D., LL.D., Professor of *Chemistry*.  
 EDWARD T. REICHERT, M.D., Professor of *Physiology*.  
 GEORGE A. PIERSON, M.D., Professor of *Anatomy*.  
 JOHN MARSHALL, M.D., Nat.Sc.D., Assistant Professor of *Chemistry*.

ROBERT HUEY, D.D.S., Lecturer on *Operative Dentistry*.  
 EDWARD C. KIRK, D.D.S., Lecturer on *Operative Dentistry*.  
 JOHN D. THOMAS, D.D.S., Lecturer on *Nitrous Oxide*.

### CLINICAL INSTRUCTORS.

DR. C. S. BECK, DR. H. C. REGISTER, DR. R. R. UNDERWOOD,  
 DR. W. G. A. BONWILL, DR. GEO. W. KLUMP, DR. I. F. WARDWELL,  
 DR. E. H. NEALL, DR. W. R. MILLARD, DR. J. A. WOODWARD.

### DEMONSTRATORS.

WILLIAM DIEHL, D.D.S., Demonstrator of *Operative Dentistry*.  
 JOSEPH W. WHITE, D.D.S., Assistant Demonstrator of *Operative Dentistry*.  
 JAMES E. LODER, D.D.S., Assistant Demonstrator of *Operative Dentistry*.  
 J. E. DUNWOODY, D.D.S., Assistant Demonstrator of *Operative Dentistry*.  
 CHARLES A. E. CODMAN, D.D.S., Assistant Demonstrator of *Operative Dentistry*.  
 R. HAMILL D. SWING, D.D.S., Assistant Demonstrator of *Operative Dentistry*, and Demonstrator of *Anesthetics*.  
 JUSTINO S. DILK, D.D.S., Assistant Demonstrator of *Operative Dentistry*.  
 HARRY B. MCFADDEN, D.D.S., Demonstrator of *Mechanical Dentistry*.  
 AMBLER TEES, JR., D.D.S., Assistant Demonstrator of *Mechanical Dentistry*, and Demonstrator of *Continuous Gum Work*.  
 FREDERICK W. AMEND, JR., D.D.S., Assistant Demonstrator of *Mechanical Dentistry*.  
 MILTON N. KEIM, JR., D.D.S., Assistant Demonstrator of *Mechanical Dentistry*.  
 C. HERBERT WILSON, D.D.S., Assistant Demonstrator of *Mechanical Dentistry*.  
 FREDERICK A. PEESO, D.D.S., Demonstrator of *Crown and Bridge Work*.  
 JAMES G. LANE, D.D.S., Assistant Demonstrator of *Crown and Bridge Work*.  
 EDMUND W. HOLMES, M.D., Demonstrator of *Anatomy*.

### SESSIONS.

The *Winter Session* begins on October 1st, and ends at Commencement early in *May*. The number of lectures per week, with a synopsis of the various branches taught, will be found in the General Catalogue.

The *Spring Session* begins the first Monday in May and ends the last of June. The work of this session is entirely practical; no lectures are delivered.

### EXAMINATIONS.

Attendance upon three regular winter courses of lectures will be required before the final examination for the degree of Doctor of Dental Surgery.

At the close of the first year, examinations are held in *Chemistry, Histology, and Dental Materia Medica*, the end of the second year upon *Anatomy and Physiology*. If the student is not qualified, a second examination is afforded him at the beginning of the next winter session.

The final examination at the end of the course is in *Operative Dentistry, Mechanical Dentistry, Metallurgy, Dental Pathology and Therapeutics*.

All applicants for advanced standing must pass the required examinations of this school, or furnish proof that they have passed equivalent examinations in some recognized dental or medical school.

Graduates of regular medical schools in good standing are admitted to the second year without an examination.

An examination is required for entrance. Students who have certificates properly attested from colleges, or schools of reputable character, will be accepted without examination, all others must pass an examination in the elements of a good English education.

### EXPENSES.—Winter Term.

Matriculation Fee (paid once only),	\$5.00	Dissecting Fee (Second year),	: . \$10.00
Fee for One Course of Lectures,	- 100.00	Graduation Fee (Third year),	: . 80.00

For information and announcements address,

JAMES TRUMAN, Dean,

3243 Chestnut Street, Philadelphia, Pa.

# The Baltimore College of Dental Surgery.

*Chartered by the Legislature of Maryland in 1839.*

**THE OLDEST DENTAL COLLEGE IN THE WORLD.**

## FACULTY :

RICHARD B. WINDER, M.D., D.D.S., Professor of Dental Surgery and Operative Dentistry.  
M. WHILLDIN FOSTER, M.D., D.D.S., Professor of Therapeutics and Pathology.  
WM. B. FINNEY, D.D.S., Professor of Dental Mechanism and Metallurgy.  
B. HOLLY SMITH, M.D., D.D.S., Professor of Special Anatomy and Dental Materia Medica.  
THOMAS S. LATIMER, M.D., Professor of Physiology.  
WILLIAM SIMON, M.D., Ph.G., Professor of Chemistry.  
CHARLES F. BEVAN, M.D., Clinical Professor of Oral Surgery.  
J. W. CHAMBERS, M.D., Professor of Anatomy.  
GEORGE H. ROHE, M.D., Professor of Materia Medica.

## LECTURERS :

WM. F. SMITH, A.B., M.D., Regional Anatomy. J. N. FARRAR, M.D., D.D.S., Irregularities.  
J. MEYER, D.D.S., Continuous-Gum. Dr. GEO. EVANS, Crown and Bridge-Work.  
Dr. K. C. GIBSON, Artificial Palates and Fractured Maxillaries.

## CLINICAL INSTRUCTORS :

CORYDON PALMER, D.D.S. . . . .	Ohio.	C. M. GINGRICH, D.D.S. . . . .	Md.
E. PARMLY BROWN, D.D.S. . . . .	N. Y.	J. HALL MOORE, M.D. . . . .	Va.
A. L. NORTHPROP, D.D.S. . . . .	N. Y.	JOHN ALLEN, D.D.S. . . . .	N. Y.
CHAS. R. BUTLER, D.D.S. . . . .	Ohio.	R. B. DONALDSON, D.D.S. . . . .	D. C.
E. L. HUNTER, D.D.S. . . . .	N. C.	H. A. PARR, D.D.S. . . . .	N. Y.
W. W. WALKER, D.D.S. . . . .	N. Y.	J. EMORY SCOTT, D.D.S. . . . .	Md.
T. S. WATERS, D.D.S. . . . .	Md.	E. R. RUST, D.D.S. . . . .	D. C.
DAVID GENESE, D.D.S. . . . .	Md.	C. L. ALEXANDER, D.D.S. . . . .	N. C.

## DEMONSTRATORS :

R. BAYLY WINDER, JR., Phar. G., D.D.S., Demonstrator of Operative Dentistry.  
W. G. FOSTER, D.D.S., Demonstrator of Mechanical Dentistry.

## ASSISTANT DEMONSTRATORS :

GEORGE E. HARDY, M.D., D.D.S. G. MARSHALL SMITH, D.D.S.  
W. W. DUNBRACCO, D.D.S. J. E. ORRISON, D.D.S.  
J. W. SMITH, D.D.S. W. S. TWILLEY, D.D.S.  
J. S. SUTHERLAND, D.D.S.

W. F. SMITH, M.D., Demonstrator of Anatomy.  
LOUIS F. ANKRIM, M.D., Assistant Demonstrator of Anatomy.  
R. G. DAVIS, M.D., Assistant Demonstrator of Anatomy.

The Baltimore College of Dental Surgery, the first and for many years the only dental school, offers facilities for the study of dentistry proper such as age and experience only can give. Its immense museum, complete apparatus, large and well arranged building, and carefully-studied curriculum, give to its students great advantages and opportunities, both theoretical and practical, while its age gives its diploma a dignity far out-ranking all other colleges—a diploma honorably represented in all civilized countries, and held by the most distinguished members of the dental profession.

The fact that dentistry must be practically taught is fully recognized, the College Infirmary, a most complete, large and handsome hall, being daily filled with clean and respectable patients, of a class nearly equal to those of the average dentist. The Infirmary is open all the year, students paying an entrance fee, which is deducted from those of the regular succeeding course.

The session begins October 1, closing in March. A large corps of Demonstrators, always present, put in actual practice the teachings of all lecturers in dentistry—leaving nothing undemonstrated. All methods are fully taught, all appliances and apparatus used; the making of instruments and the most elaborate gold and continuous-gum work, and all the cases arising in ordinary practice, with many which are rarely seen, carefully demonstrated.

The College has formed an alliance with the College of Physicians and Surgeons, by which its students are privileged to attend all lectures and clinics. The patients of this medical school numbered last year over 40,000. Graduates of the Baltimore College of Dental Surgery are required to attend but one session at the College of Physicians and Surgeons prior to presenting themselves as candidates for the degree of M.D. (See Catalogue.) In accordance with the resolutions adopted by the National Association of Dental Faculties, which go into effect for the session of 1891 and 1892, the qualifications for entering the first year's course are a preliminary examination in the ordinary English branches.

**TERMS OF GRADUATION.**—Attendance on three winter courses of lectures in this College; as equivalent to one of these, we accept one course in any reputable dental college. Graduates in medicine can enter the junior class.

**BENEFICIARY STUDENTS.**—Each State Dental Society is privileged to send one Beneficiary Student to this College at one-half the regular fees. This has been for some years an established feature of this College.

**FEES.**—Matriculation (paid once only), \$5.00. Tuition fee, \$100.00. Diploma fee, \$30.00. Dissecting fee, \$10.00.

Students corresponding with the Dean will please be careful to give full address, and direct their letters to

**Prof. R. B. WINDER, Dean,**  
**No. 716 Park Avenue, Baltimore, Md.**

# UNIVERSITY OF MARYLAND.

## DENTAL DEPARTMENT.

N. E. Corner of Lombard and Green Streets, BALTIMORE, MD.

HON. SEVERN TEACKLE WALLACE, LL.D., Provost.

### —FACULTY.—

FERDINAND J. S. GORGAS, M.D., D.D.S., Professor of Principles of Dental Science and Dental Surgery and Mechanism.  
JAMES H. HARRIS, M.D., D.D.S., Professor of Operative and Clinical Dentistry.  
FRANCIS T. MILES, M.D., Professor of Physiology.  
D. McLANE TIFFANY, M.D., Clinical Professor of Oral Surgery.  
RANDOLPH WINSLOW, M.D., Professor of Anatomy.  
R. DORSKY COALE, Ph.D., Professor of Chemistry and Metallurgy.  
J. EDMONDSON ATKINSON, M.D., Professor of Materia Medica and Therapeutics.  
JOHN C. UHLER, M.D., D.D.S., Demonstrator of Mechanical Dentistry.  
ISAAC F. DAVIS, M.D., D.D.S., Demonstrator of Operative Dentistry.  
J. H. SMITH, M.D., and R. B. WARFIELD, M.D., Demonstrators of Anatomy.

The principal Demonstrators are assisted by sixteen Assistant Demonstrators.

Special instructions in Continuous Gum and Bridge Work.

Each year since its organization has added to the reputation and prosperity of this Dental School, until now its graduates in almost every part of the world, are meeting with the success that ability will ever command. The past session was the most successful one ever held; and visiting dentists from all parts of the country have expressed themselves as being astonished and gratified at the ability shown by the students when operating upon patients in the infirmary. Forming one of the departments of one of the oldest universities in the country, its diploma is everywhere recognized and honored.

The instructions in both operative and mechanical dentistry is as thorough as it is possible to make it, and embraces everything pertaining to dental art. The advantages which the general and oral surgical clinics, to which the dental students are admitted (as indeed to all the lectures the University affords), cannot be overestimated. The many thousands of patients annually treated in the University Hospital, and other sources, afford an abundance of material for the dental infirmary and laboratory practice, and the oral surgery clinics.

The Dental Infirmary and Laboratory building is one of the largest and most complete structures of the kind in the world. The Infirmary is lighted by sixty-five large windows, and is furnished with the latest improved operating chairs.

The Dental Infirmary and Laboratory are open daily (except Sundays) during the entire year for the reception of patients, and the practice for dental students has increased to such an extent that all the students during the past session have had an abundance of practical work in both operative and prosthetic dentistry. This means for practical instruction has already assumed such large proportions that the supply has been beyond the needs of the large classes in attendance during the past sessions.

The exceedingly large number of patients for the extraction of teeth affords ample facilities for practical experience to every student. It has again become necessary to enlarge the dental building, making the Infirmary nearly one hundred feet in length, and a Laboratory eighty feet long by forty-three wide.

The Qualifications for Admission and Graduation are those adopted by the National Association of Dental Faculties and State Boards of Dental Examiners.

**Qualifications for Graduation:** The candidate must have attended three full courses of lectures of five months each in different years at the Regular or winter sessions in this institution. As equivalent to one of these, one course in any reputable dental college will be accepted. Graduates of medicine can enter the Junior Class. The matriculant must have a good English education; a diploma from a reputable literary institution, or other evidence of literary qualifications will be received instead of a preliminary examination. All students, both juniors and seniors, have equal advantage in operative and mechanical dentistry in this institution throughout every session.

**Graduation in Medicine:** Graduates of the Dental Department of the University of Maryland are required to attend but one session at the University School of Medicine prior to presenting themselves as candidates for the degree of "Doctor of Medicine." (See catalogue).

The Regular or Winter Session will begin on the first day of October, of each year, and will terminate in the following March.

The Summer Session for practical instruction, will commence in March and continue until the regular session begins. Students in attendance on the summer session will have the advantage of all the daily Surgical and Medical Clinics of the University.

The fees for the Regular Session are \$100; Demonstrators' fees included; Matriculation fee, \$5; Diploma fee, for candidates for graduation, \$30; Dissecting ticket, \$10.

For Summer Session, no charge to those who attend the following Winter Session.

**Beneficiary:** A beneficiary student will be received from each State, on the recommendation of the State Dental Society, on the payment of half of the tuition fees. Board can be obtained at from \$3.50 to \$5 per week, according to quality.

The University prize and a number of other prizes will be specified in the annual catalogue.

Students desiring information and the annual catalogue will be careful to give full address and direct their letters to

**F. J. S. GORGAS, M.D., D.D.S.,**

Dean of the Dental Department of the University of Maryland, 845 N. Eutaw St.,  
Baltimore, Md.

# PHILADELPHIA DENTAL COLLEGE

## AND HOSPITAL OF ORAL SURGERY,

Cherry, above Seventeenth Street.

THE COLLEGE TERM begins with the Spring Session, March 1, which Session continues until the last of May. A Fall Session begins on the second Monday in September. The above are auxiliary to the regular course, which commences the first of October, and continues until the end of the ensuing February. The lectures at large are so arranged that seven hours of each day may be spent by the student in the laboratory or dispensary on practical work, as this pertains to the every-day duties of a practitioner. Matriculation is made at the beginning of the Spring, Fall, or Winter Session.

The Dispensary and Laboratory are open all the year, except during the summer vacation. Instruction in *Practical Dentistry* is a prominent feature of the institution. This work is under the supervision of an executive committee, composed of the practicing dentists of the school, the members of which, aided by competent Demonstrators, give special attention to the interests of students. The Dispensary consists of large, well-lighted rooms, furnished with comfortable operating chairs, tables and all conveniences. As an excess of patients is in attendance at the clinics, the opportunities here presented for acquiring a knowledge of clinical dentistry are ample and complete. The new laboratory is the largest of its kind in the country.

A clinic in *Oral Surgery* is held every Saturday at 12 M.

**Graduation.**—Attendance on three courses of Lectures, and satisfactory examinations in theory and practice are required for graduation. **Graduates in Medicine** are eligible for graduation in Dentistry after attendance on Lectures and Clinical Service during two courses. These latter are excused from examination on Anatomy, Chemistry, Physiology, and Surgery.

**Fees.**—Tickets for each course, including the Demonstrator's, \$100; Matriculation, inclusive of Syllabi for home study, \$5 for each course; Examination and Diploma Fee, \$25. Board, \$4 to \$6 per week.

**Special Clinics,** for the study and treatment of Diseases of the Teeth, are held twice weekly by Profs. FLAGG and STELLWAGEN, and on Crown and Bridge-work Wednesdays and Fridays, at 8 A. M., by Prof. GUILFORD.

**Lectures on Descriptive Anatomy,** by DR. BOENNING, are given Monday and Thursday evenings, at 8 o'clock.

**Examinations.** First Year.—Progress in Anatomy, Physiology, Anæsthetics and Anæsthesia. Second Year.—Progress in Chemistry, Prosthetic and Operative Dentistry, and final in Anatomy, Physiology and Anæsthetics and Anæsthesia. Third Year.—Final in Chemistry and Materia Medica, Practical, Prosthetic, and Operative Dentistry, and Dental Pathology and Therapeutics.

**Practical Requirements.** First Year (Freshman).—General plate-work in laboratory, and the preparation and filling of at least twenty-four cavities in extracted teeth with Tin-foil, Gutta-percha, Zinc-phosphate, and Amalgam. The cavities, when prepared, are to be shown to the Demonstrators for criticism or approval, as also the fillings when completed. The best six of the entire number are to be mounted and deposited in the College Museum. Any student failing to do the above work satisfactorily, will have his admission to the Junior Class conditioned on completion of it before the middle of the Junior Term. Second Year (Junior).—General plate-work and the making of the prescribed depositing plate, also the preparation of roots and the making and mounting of six dowel crowns, three hollow metal crowns, and a piece of bridge-work, including two or more suspended crowns, on teeth *out of the mouth*. Third Year (Senior).—Making of practical case and the requisite graduation fillings. In special cases, subject to the approval of the Professor of Practice, a case of crown or bridge-work (in the mouth) may be accepted in lieu of the practical plate. Hours for examination of practical work and graduation fillings, Mondays, Tuesdays and Saturdays, from 10.30 A. M. to 12 M.

### —FACULTY.—

HENRY MORTON, A.M., Ph.D., Emeritus Professor of Chemistry.

C. A. KINGSBURY, M.D., D.D.S., Emeritus Professor of Dental Histology and Operative Dentistry.

S. H. GUILFORD, D.D.S., Ph.D., Professor of Operative and Prosthetic Dentistry.

J. FOSTER FLAGG, D.D.S., Professor of Dental Pathology and Therapeutics.

HENRY I. DORR, M.D., D.D.S., Professor of Practice of Dentistry, Anæsthetics and Anæsthesia.

S. B. HOWELL, M.D., D.D.S., Professor of Chemistry and Materia Medica.

THOMAS C. STELLWAGEN, M.D., D.D.S., Professor of Physiology.

JAMES E. GARRETSON, M.D., D.D.S., Professor of Anatomy and Surgery, Surgeon to the Oral Clinic.

M. H. CRYER, M.D., D.D.S., Chief Assistant of Oral Surgical Clinic.

HENRY C. BOENNING, M.D., Demonstrator of Anatomy.

L. GREENBAUM, M.D., D.D.S., Demonstrator of Chemistry and Materia Medica.

A. D. GRITMAN, D.D.S., Demonstrator of Prosthetic Dentistry.

JOHN O. BOWWELL, D.D.S., Demonstrator of Practice of Dentistry.

For announcements containing views of College buildings and apartments, together with particulars, address,

**Dr. JAMES E. GARRETSON, Dean of the Faculty,**

**1537 Chestnut Street, Philadelphia, or at College.**

Ch. Marchand's



Trade Mark.

# CH. MARCHAND'S PEROXIDE OF HYDROGEN

(MEDICINAL)  $\text{H}_2\text{O}_2$  (ABSOLUTELY HARMLESS.)

MOST POWERFUL BACTERICIDE AND PUS DESTROYER.

ENDORSED BY THE MEDICAL PROFESSION.

UNIFORM IN STRENGTH, PURITY AND STABILITY.

RETAINS GERMICIDAL POWER ANY LENGTH OF TIME.

**USED BY THE HOSPITALS OF THE U. S. ARMY.**

Send for free book of 88 pages giving articles by the following contributors:

DR. E. R. SQUIBB, of Brooklyn, N. Y., DR. ROBT. T. MORRIS, of N. Y.,  
DR. EGBERT H. GRANDIN, of N. Y., DR. JOHN AULDE, of Phila., Pa., DR.  
W. F. WAUGH, of Phila., Pa., DR. GEO. B. HOPE, of N. Y., DR. E. CHAREST,  
of St. Cloud, Minn., DR. G. F. ADAMS, of Pulaski, N. Y., DR. H. F. WIGGIN,  
of N. Y., DR. J. A. LARRABEE, of Louisville, Ky., DR. R. M. CHASE, of Bethel, Vt.,  
DR. ROBT. T. WILSON, of Baltimore, Md., DR. J. H. SHERMAN, of Boston, Mass.,  
DR. C. M. WOODWARD, of Tecumseh, Mich., DR. GEO. H. PIERCE, of Brooklyn,  
N. Y., and many others.

**NOTE.**—Avoid substitutes—in shape of the commercial article bottled—unfit,  
unsafe and worthless to use as a medicine.

Ch. Marchand's Peroxide of Hydrogen (Medicinal) is sold only in 4-oz.,  
8-oz., and 16-oz. bottles, bearing a blue label, white letters, red and gold  
border, with his signature. Never sold in bulk.

# GLYCOZONE.

PREVENTS FERMENTATION OF FOOD IN THE STOMACH.

MOST POWERFUL REMEDY FOR HEALING PURPOSES. CURES:

DYSPEPSIA, GASTRITIS, ULCER OF THE STOMACH, HEART-BURN.

Glycozone is sold only in 4-oz., 8-oz., and 16-oz. bottles. Never sold in bulk.

PHYSICIANS WILLING TO PAY EXPRESS CHARGES WILL RECEIVE FREE SAMPLES ON APPLICATION.

BOTH OF THE ABOVE REMEDIES

ARE PREPARED ONLY BY

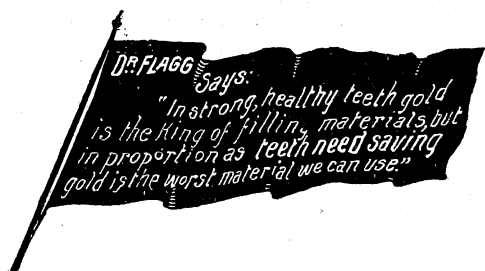
☞ Mention this publication.

Chemist and Graduate of the "Ecole Centrale des Arts et Manufactures de Paris (France)."

**SOLD BY**  
**LEADING DRUGGISTS. Laboratory, 28 Prince St., New York.**

# THEIR QUALITIES OUTSHINE GOLD.

Those Brilliant Tooth Savers.



It is here where our Alloys, Amalgams and Cements have come in successfully for the last eighteen years! And it has been demonstrated that

They occasion less pain,

Above all suitable for children under 12,

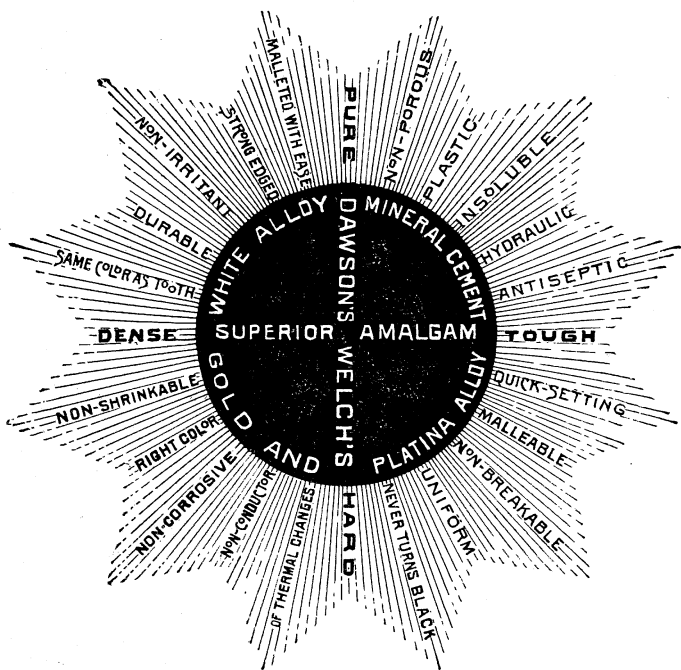
Preserve the tissues of defective teeth,

Save teeth previously filled with gold,

Save time, money, nervous force,

and in setting crowns, as well as filling large and inaccessible cavities, they possess far more superior qualities than gold, or any other fillings in the market to-day.

They quicken new hopes in patients, banish worry in the operator, and bring blissful peace into the homes of the teeth, where *war to the forceps*, with all its terrible devastations, used to reign supreme, before these star remedies came to illumine the dental sky.

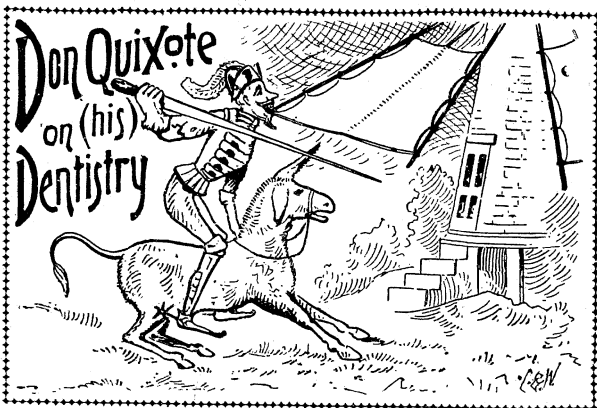


The constantly increasing demand for these perfect plastic fillings, which are prepared under the most careful supervision, is sufficient proof of their continued excellence and universal use.

THE WILMINGTON DENTAL M'FG CO.,  
PHILADELPHIA, NEW YORK, CHICAGO, WASHINGTON, WILMINGTON.

# The Tooth is Mightier Than the Sword.

TRUE CHIVALRY IN DENTISTRY.



"A DIAMOND IS NOT SO PRECIOUS AS A TOOTH," is the characteristic expression used by Cervantes in his immortal "Don Quixote." Some might infer that had Quixote RELIED ON HIS TEETH he would have been more successful in his career.

But we infer something more. We believe that the importance of "dentistry" will be recognized more and more, with the spread of sound opinions that all human culture—intellectual, as well as moral—is most intimately connected with, nay, based on physical development, of which the teeth are the most essential factor.

"Sound teeth in a sound mouth" ought to precede the Shakespearean "sound mind in a sound body." In vain will a nation appeal to the sword, after having neglected the teeth of its children, its would-be defenders and preservers!

To bring all dentists, and through them, the public, in line of march of these progressive ideas which go to enrich and ennoble their profession, has been the highest aspiration of enlightened modern dental journalism. The conscientious efforts made by our esteemed contemporaries in raising the standard of their respective publications is a matter on which the profession can be congratulated.

The spirit of enterprise, however, so indispensable to the development of both science and art, has not been evenly displayed by all; and it is, therefore, a pleasant duty to record, as we have done in "Our Prospectus," in this issue, some of the most salient features by which our magazine will be distinguished from all others in 1893, thus making **THE ITEMS OF INTEREST** the favorite of the busy profession.

But dentistry is not only a busy and useful profession, it is also one that requires and develops artistic tastes and chivalrous conduct in some of its finer manifestations, and this magazine mirrors those high characteristics in its artistic appearance, and the general tone of its helpful hints, intermingled with its varied contents.

If you want to share the advantages of our magazine with the majority of dentists at home and in forty-five other countries, be chivalrous, and subscribe for it NOW. It costs you only one dollar per year.

\*\*\*\*\*

THE WILMINGTON DENTAL M'FG CO.,

\*\*\*\*\*

PHILADELPHIA, NEW YORK,  
CHICAGO, WASHINGTON, WILMINGTON.



